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Civilians at War:
Reexamining the Status of Civilians
Accompanying the Armed Forces
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I. Introduction

Until the last century, the infliction of violence during war was an intimately personal experience. Warriors fighting with sword and spear could not be far removed from their opponents. The advent of gunpowder and later of aircraft stretched the physical dimensions of the battlefield, but still kept combatants in close proximity to the targets of their attack.

New technologies available to states have expanded the zone of conflict while at the same time allowing personnel engaged in hostilities to be far removed from the battlefield. This remotely conducted combat may take forms such as attacking an enemy's computer networks with worms and viruses or using remotely controlled unmanned aircraft to launch missiles onto the battlefield. Utilizing these methods, combatants sitting before computer screens can launch attacks against an enemy hundreds or even thousands of miles away.

A second development in the realm of armed conflict is the widespread practice of states shifting activities previously performed by military personnel to civilian employees and contractors. States increasingly are integrating civilians into their military forces, relying on them to operate and maintain sophisticated military equipment and to support combat operations. While this practice offers substantial benefits to states, which may be able to save money and gain access to

superior technical expertise, it brings with it the risk of violating the law of war by inappropriately involving civilians in combat operations.

The law of war attempts to regulate state utilization of civilians in combat operations in the course of international armed conflicts by prohibiting civilians from directly participating in combat. The policy behind this prohibition is the desire to protect civilians from being targeted for attack. The effectiveness of this prohibition has been substantially undercut, however, by the failure of the law of war to provide a clear definition of what constitutes direct participation in combat. A prohibition that may have been easy to apply with simple weapons systems operating at short range does not provide clear guidance about the legality of civilians providing essential services in support of a state's warfighting efforts. States are aware of this ambiguity and have taken advantage of it to increase civilian participation in military activities.

The intersection of states making increased use of civilians and the development of remotely conducted combat operations forms a useful lens through which to analyze the inadequacies of the law of war in regulating civilian participation in combat in international conflicts. Civilians are significantly involved in maintaining and operating the technologically complex systems used in remotely conducted combat operations and the definitional ambiguities and inadequacies in the prohibition in the law of war against

civilians directly participating in combat are accentuated when any attempt is made to apply this prohibition to civilians supporting or engaging in combat activities far away from any battlefield.

The issue of the extent to which civilian employees and contractors may participate lawfully in combat activities and, in turn, be the subject of a lawful attack is relevant for four reasons. First, states are increasing the role civilians play in their armed forces to the point that civilians play an indispensable role in the ability of many states to use military force. Second, clear and logical guidelines concerning what combat related activities these civilians may engage in are necessary to prevent a blurring between civilians and combatants that may endanger the general civilian population. Third, civilians who do engage in combat activities in violation of the law of war may become unlawful combatants and face criminal liability for their actions. Fourth, a state using civilians in violation of the law of war will be in breach of its responsibilities under that law.

The law of war concerning civilians accompanying the armed forces needs to be changed to better protect them and to maintain the general distinction between combatants and civilians unaffiliated with the military, while also acknowledging and legitimizing the fact that civilians are so integrated into many armed forces that they have become an indispensable and inseparable part of them. To accomplish these

goals, the law of war should be modified in three ways: 1) direct participation in combat should be defined clearly and narrowly to enable states and individuals to determine when civilians are engaging in combat; 2) states, after complying with appropriate notification requirements, should be able to designate civilian employees as combatants for the purpose of engaging in remotely conducted combat operations, and 3) civilian contractors and employees who provide direct and essential support to combat operations should be acknowledged as legitimate targets for attack.

The proposed changes in the law of war will be explored in six sections, beginning with Section II, which discusses the range of activities involved in two primary types of remotely conducted combat operations: computer network attack and exploitation and the use of remote-controlled vehicles.

Section III examines provisions in the law of war relevant to civilian employees and contractors. This examination includes a discussion of how civilians and combatants are defined under the law of war and the treatment accorded civilians accompanying the armed forces. This section discusses the meaning of the prohibition on civilians taking direct part in hostilities and how ambiguity over what civilian activity falls within this prohibition undercuts its effectiveness.

Section IV provides an overview of how states currently are integrating civilian employees and contractors into their militaries and using them in combat operations.

Section V examines the extent to which civilian employees and contractors may participate in remotely conducted combat operations under the law of war.

Section VI discusses problems with how the law of war regulates civilian participation in remotely conducted combat operations.

Section VII explains how the law of war should be changed to better regulate the combat-related activities of civilians accompanying the armed forces.

In the course of discussing these issues, a particular, although not exclusive, focus will be placed on how the United States uses civilian employees and contractors. This emphasis reflects the fact that the United States has significant capabilities to conduct combat remotely, has engaged in several international armed conflicts in recent years, and uses large numbers of civilian employees and contractors.

II. Types of Remotely Conducted Combat Operations

A. The Spectrum of Computer Network Attack and Exploitation Activities

Computers are indispensable components of a modern economy and military. The benefits computers provide, however, come at a cost. The same computers that process financial transactions for a bank, monitor maintenance of military aircraft, or control

the flow of natural gas through a pipeline are vulnerable to computer network attack and exploitation (hereinafter CNAE) and this threat is growing.¹

Computer network attack (hereinafter CNA) involves operations that target an enemy's computer systems for the purpose of destroying, altering, or denying the systems or the information they contain.² Computer network exploitation (hereinafter CNE) involves operations intended to obtain information from an enemy's computer systems.³ Three characteristics of CNAE are: 1) they may be carried out from almost any location, 2) they may achieve many of the same results of conventional weapons, and 3) states have a widespread interest in developing the capacity to engage in CNAE.

CNAE operations are well-suited to being conducted remotely because a targeted computer network can be attacked from any

¹ THE WHITE HOUSE, THE NATIONAL STRATEGY TO SECURE CYBERSPACE (2003), available at <http://www.whitehouse.gov/pcipb/> [hereinafter NATIONAL STRATEGY].

² JOINT CHIEFS OF STAFF, JOINT PUBLICATION 3-13, JOINT DOCTRINE FOR INFORMATION OPERATIONS GL-5 (1998).

³ See Jody Evans, *Information Operations Law*, in AIR FORCE JUDGE ADVOCATE GENERAL SCHOOL'S INFORMATION OPERATIONS LAW HANDBOOK (2002) available at <http://www.maxwell.af.mil/au/cpd/jagschool/press/iolh/index.htm> (defining CNE at para. IV(A)(6) and discussing range of legal issues involved in information operations, of which CNA and CNE are subsets).

computer or other device with which it can communicate.⁴ Some computer networks are connected to larger computer networks, such as the Internet, that are accessible to the public.⁵ These publicly accessible networks are susceptible to being attacked from any computer linked to the network, no matter where in the world it is located.⁶ Other computer networks reside on private networks where access to publicly accessible networks is either nonexistent or controlled.⁷ Private computer networks are more difficult to penetrate in a CNAE operation, but they, too, are

⁴ Tim Gibson, *What You Should Know About Attacking Computer Networks*, UNITED STATES NAVAL INSTITUTE: PROCEEDINGS, Jan. 2003, available at 2003 WL 12258933. See also Maria O'Daniel, *Differences in Computer Networks*, NEW STRAITS TIMES-COMPUTIMES, Oct. 21, 1999, at 41 (defining computer networks as a set of computers linked together by some means of communication such as cables or satellite links that can communicate with one another).

⁵ Gibson, *supra* note 4.

⁶ See generally *Cyber Terrorism: The New Asymmetric Threat: Hearing Before the Subcomm. on Terrorism, Unconventional Threats and Capabilities of the House Comm. on the Armed Services*, 108th Cong. (2003) (statement of Richard Dacey, Director, Information Security Issues, Gen. Accounting Office), reprinted in U.S. GEN. ACCOUNTING OFFICE, GAO-03-1037T, INFORMATION SECURITY: FURTHER EFFORTS NEEDED TO FULLY IMPLEMENT STATUTORY REQUIREMENTS IN DOD (2003), available at <http://www.gpoaccess.gov/gaoreports/index.html> (discussing how British computer administrator scanned tens of thousands of U.S. military computers from his home, eventually breaking in to almost 100 U.S. networks) [hereinafter *Dacey Cyber Terrorism Statement*]; and Andrea Stone, *Cyberspace is the Next Battlefield: U.S., Foreign Forces Prepare for Conflict Unlike Any Before*, USA TODAY, June 19, 2001, at 1A (discussing how U.S. military computer networks have been penetrated on numerous occasions, including by hackers from Russia and others who at first appeared to come from the U.A.E. but were later traced to California).

⁷ Gibson, *supra* note 4.

subject to attack.⁸

After a computer network has been penetrated, the basic concept of a CNAE operation involves inserting special types of software code into it. These types of code, often referred to as malicious code because of the purposes for which they are used, include viruses,⁹ worms,¹⁰ trojan horses,¹¹ logic bombs,¹² spyware,¹³ and back doors.¹⁴ Successful insertion of these codes

⁸ See *id.*

⁹ Viruses are pieces of software code that can be inserted into software programs. When an infected program is executed, the virus replicates itself and spreads. *Cyber Terrorism: The New Asymmetric Threat: Hearing Before the Subcomm. on Terrorism, Unconventional Threats and Capabilities of the House Comm. on the Armed Services*, 108th Cong. (2003) (statement of Eugene H. Spafford, Professor and Director of the Purdue University Center for Education and Research in Information Assurance and Security) available at <http://www.house.gov/hasc/schedules/2003.html#jul03> [hereinafter *Spafford Cyber Terrorism Statement*].

¹⁰ Worms are software programs that contain some similarities to viruses. Worms can run independently and can travel throughout a network. Worms may change other programs or contain other software code, such as a virus, that does. *Id.*

¹¹ Trojan horses are software programs that conceal their true function behind the guise of a benign one. A trojan horse program may appear as a game available for download. While the user plays the game, the trojan horse sets about performing its true purpose, destroying or altering information on the user's computer system. programs that appear to be desirable to operate. *Id.*

¹² Logic bombs are software code contained in programs that activate when predetermined triggering conditions are met. The bombs are typically created when the software is being developed. When triggered, the logic bomb may cause the system to stop or may damage or destroy data within it. *Id.*

¹³ Spyware software can monitor activity on a computer and then send that information to a desired location. *Id.*

¹⁴ Back doors are shortcuts written into software programs allowing entry into the program without following normal authentication requirements. *Id.*

into a computer network may allow a CNAE operator to control the network, damage it, retrieve information from or place false information into it, or to shut it down.¹⁵ The effects of an attack, and the choice of which CNAE tools to use, depend on the purpose served by the targeted computer network.¹⁶

Computer networks serve two primary purposes: as information systems and as infrastructure control systems.¹⁷ Information systems process information but do not control anything tangible other than themselves.¹⁸ These systems may contain documents, databases, and other types of information, and include the numerous local area networks operated by governments, businesses, and other organizations to help them transact their affairs.¹⁹ Successful attacks against information systems do not cause direct physical damage, but may still cause significant harm.²⁰ Examples of the type of damage such attacks can cause are provided by viruses and worms that have spread through the Internet. A single worm, known as the ILOVEYOU worm, spread to more than 500,000 computer systems in one day in

¹⁵ See *id.* and Gibson, *supra* note 4.

¹⁶ See Gibson, *supra* note 4.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ Dacey Cyber Terrorism Statement, *supra* note 6 (discussing how one worm, the SQL Slammer worm, infected 90% of all vulnerable computers in the world in ten minutes and caused network outages, resulting in canceled airline flights and ATM outages). See also Gibson, *supra* note 4 (indicating how such attacks could include transferring money out of domestic banks to accounts abroad).

2000 and caused an estimated ten billion dollars in damage.²¹

Multiple other incidents involving worms and viruses have each caused a billion dollars or more in damages.²² Even unsuccessful attacks may have a significant impact because computer network users may be reluctant to rely on them for fear they have been corrupted.²³

The second type of computer network, infrastructure control systems, interact with and control tangible equipment.²⁴ The most common type of this system is the supervisory control and acquisition (hereinafter SCADA) system.²⁵ These systems are used to control transportation, water, power, and manufacturing facilities throughout the world.²⁶ SCADA systems monitor data and operations at the facility they control and send instructions to equipment.²⁷ SCADA systems represent an attractive military target because important industrial infrastructure supporting military operations may be damaged

²¹ *Spafford Cyber Terrorism Statement*, *supra* note 9.

²² *Id.* (discussing the Code Red and Nimda worms, which caused several billion dollars in damage in 2001, and the Sapphire/Slammer worms, which caused over a billion dollars in damage in 2003).

²³ David A. Fulghum & Douglas Barrie, *Cracks in the Net*, AVIATION WEEK & SPACE TECHNOLOGY, June 30, 2003, at 52 (discussing growing concern that small, precise attacks on military computer networks, even if unsuccessful, may make military leaders unsure whether the data within them is false or corrupted, meaning they would be unable to rely on the information during potentially crucial moments of a military operation).

²⁴ Gibson, *supra* note 4.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

without the use of physical weapons.²⁸ At least one documented attack on a SCADA system, albeit by a private individual, has occurred. In this attack, the SCADA system of a sewage treatment plant in Australia was penetrated on multiple occasions for the purpose of releasing raw sewage into nearby parks and rivers.²⁹

States ability to engage in CNAE is not just theoretical. While the exact details are intentionally kept secret, the United States possesses both the capability and strategy for using CNAE.³⁰ The United States is believed to have used some form of CNA in Iraq³¹ and to have considered its use in the

²⁸ *Id.* See also *Dacey Cyber Terrorism Statement*, *supra* note 6 (noting the types of potentially vulnerable infrastructure systems that may be the subject of CNA attack include power grids, gas and oil distribution pipelines, water treatment and distribution systems, hydroelectric and flood control dams, oil and chemical refineries).

²⁹ Gibson, *supra* note 4. The attacker in this case was a technician who had helped install the wireless system controlling valves at the sewage plant. He subsequently used a two-way radio, a laptop computer, and some telemetry equipment to access this wireless SCADA system and, on more than 40 occasions, cause the release of raw sewage by opening and closing valves. See *id.* and Tony Wilson, *Cybercrims the New Foe*, GOLD COAST BULLETIN (Australia), Oct. 25, 2002, at 14.

³⁰ See Bradley Graham, *Bush Orders Guidelines for Cyber-Warfare; Rules for Attacking Enemy Computers Prepared as U.S. Weighs Iraq Options*, WASH. POST, Feb. 7, 2003, at A1. The United States is maintaining even more secrecy over its arsenal of CNA and other cyberweapons than with its nuclear capabilities. *Id.*

³¹ Dawn S. Olney, *U.S. Aims to Make War on Iraq's Networks*, GOV'T COMPUTER NEWS, Feb. 24, 2003, available at 2003 WL 10986759 (quoting U.S. intelligence official stating information operations against Iraq had commenced). See also *Cyber War Bombardment Begins*, AUSTRALIAN, Mar. 20, 2003, at 25 (indicating likelihood U.S. forces have been planting viruses and corrupting databases in Iraqi computer networks).

Balkans.³² China may have used CNA against Taiwan³³ and during the first Gulf War a group of Dutch hackers apparently offered to sell Iraq information that had been retrieved from Department of Defense computer systems.³⁴

CNAE is establishing itself as an important tool in military arsenals throughout the world. As many as a hundred states are pursuing CNAE capabilities, attracted by the many advantages offered by this type of combat.³⁵ CNAE can be developed at a relatively low cost, can inflict significant damage, can be engaged in anonymously, and may reduce physical damage and casualties in a conflict.³⁶ As long as the economic health and security of modern states fully depends on computer

³² Stone, *supra* note 6, at 1A (discussing how the U.S. considered taking money from Serbian leader Slobodan Milosevic's bank accounts).

³³ *UPI Hears . . .*, UPI, Nov. 4, 2003, LEXIS, Nexis Library, UPI File (discussing how China may have used 20 or more Trojan Horse programs to attack computer networks in Taiwan).

³⁴ Josh Martin, *Virtually Helpless*, VILLAGE VOICE, Sep. 17, 2002, at 46.

³⁵ *Protecting America's Critical Infrastructures: How Secure Are Government Computer Systems? Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce*, 107th Cong. (2001) (statement of Ms. Sallie McDonald, Assistant Commissioner, Office of Information Assurance and Critical Infrastructure: US General Services Administration), available at <http://energycommerce.house.gov/107/Hearings/04052001hearing153/McDonald229.htm>.

³⁶ See Stone, *supra* note 6, at 1A.

networks, this interest in CNAE is unlikely to wane.³⁷

B. Unmanned Vehicles

Unmanned vehicles currently in use or in the process of being developed will be in the air, on the ground, and in and under water, making future battlefields as much the domain of machines as men. A future conflict could start with military technicians operating from a facility within their state thousands of miles away from the site of combat operating unmanned aerial vehicles (hereinafter UAVs) as they fly over an enemy's territory, where they attack anti-aircraft systems with missiles and launch CNA attacks against wireless SCADA systems to shut down power plants and disrupt rail traffic. A naval task force then approaches the enemy's coast, using unmanned underwater vessels (hereinafter UUVs) to destroy mines and find a safe passage for an amphibious landing. After a landing is made and a beachhead secured, armed unmanned ground vehicles

³⁷ See generally NATIONAL STRATEGY, *supra* note 1. This publication indicates the utter reliance the U.S. places on computer networks. "By 2003, our economy and national security became fully dependent upon information technology and the information infrastructure. A network of networks directly supports the operation of all sectors of our economy--energy (electric power, oil and gas), transportation (rail, air, merchant marine), finance and banking, information and telecommunications, public health, emergency services, water, chemical, defense industrial base, food, agriculture, and postal and shipping. The reach of these computer networks exceeds the bounds of cyberspace. They also control physical objects such as electrical transformers, trains, pipeline pumps, chemical vats, and radars." *Id.* at 6.

(hereinafter UGVs) carry supplies and ammunition toward a target of attack, an enemy city a hundred miles away, saving task force soldiers from facing the danger of traveling in a convoy for several days through hostile territory. Once the UGVs arrive at their destination, the soldiers will be ferried to this location by helicopter, where they will take ammunition and supplies from the UGVs and commence to attack their target.

The idea of unmanned vehicles on, or above, the battlefield, can be dated back to at least World War I, when the United States built a UAV that could be launched from a track to fly over enemy lines.³⁸ This first UAV, which never saw combat service, could not be controlled from the ground; rather, it contained a device engineered to stop the flow of gasoline to the engine after the propeller had made a predetermined number of revolutions, at which time the UAV would fall to the ground and explode.³⁹ By the time of the Vietnam War, technology had progressed to the point where UAVs could be used for reconnaissance work, and UAVs flew more than 3500 sorties during the war, although technological limitations hampered their

³⁸ John DeGaspari; *Look, Ma, No Pilot*; MECHANICAL ENGINEERING, Nov. 2003, available at <http://www.memagazine.org/backissues/nov03/features/lookma/lookma.html>.

³⁹ *Id.*

effectiveness.⁴⁰

Developments such as the creation of the Global Positioning System and improvements in information transmission made UAVs more attractive in the 1990s. UAVs could now handle more complicated intelligence and reconnaissance missions and be controlled with greater precision over greater distances.⁴¹ The United States has spent billions of dollars on UAVs and now has more than 90 UAVs in its inventory, a number that may increase fourfold in the next eight years.⁴² These UAVs, including the Global Hawk and the Predator, have been used in reconnaissance and intelligence missions in conflicts ranging from the Balkans

⁴⁰ Matthew Brzezinski, *The Unmanned Army*, N.Y. TIMES, Apr. 20, 2003, § 6, at 38. See also DeGaspari, *supra* note 38. The UAVs used in Vietnam suffered from at least two serious technological problems: they were difficult to navigate from the ground and they did not provide real-time information because they typically carried cameras which could only be examined upon completion of a mission. *Id.*

⁴¹ Michael Kilian, *Unmanned Planes Show Mixed Results; Craft Can Be Balky, Easy to Shoot Down*, CHI. TRIB., Mar. 2, 2003, at C4. The Predator UAV has a range of 500 miles and can be controlled through a satellite link. *Id.* The Global Hawk has a range of over 5000 miles. See *Testimony Before the Subcomm. on Tactical Air and Land Forces of the House Comm. on the Armed Services*, 108th Cong. (2003) (statement of Dyke Weatherington, UAV Planning Task Force, Defense Systems, Air Warfare, Office of the Secretary of Defense) available at <http://armedservices.house.gov/schedules/2003.html#mar03>.

⁴² DeGaspari, *supra* note 38. The United States plans to spend ten billion dollars on UAVs in the next decade. *Id.*

to Afghanistan and Iraq.⁴³ The Predator has been modified to carry missiles and has used them in Yemen, Afghanistan, and Iraq.⁴⁴

While several UAVs are in current use, more than sixty separate UAV programs are under development.⁴⁵ These programs include two UAVs being designed by the Air Force and Navy for combat bombing missions.⁴⁶ The Army and the Marines are each developing unmanned helicopters for carrying supplies and combat missions. A UAV is even being developed to engage in computer network attack.⁴⁷

Unmanned ground vehicles and naval vessels are also under development. The Department of Defense and Congress have established a goal of having one third of the Army's operational ground combat vehicles being unmanned by 2015 and are prepared

⁴³ Kilian, *supra* note 41. See also *Bale Out Flyer, Your Days are Numbered*, MERCURY (Australia), Dec. 4, 2003. The United States alone used ten separate UAV systems during the 2003 war in Iraq. See *Testimony Before the Subcomm. on Tactical Air and Land Forces of the House Comm. on the Armed Services*, 108th Cong. (2004) (statement of Dr. Glen Lamartin, Director, Defense Systems, Office of the Secretary of Defense) available at <http://armedservices.house.gov/openingstatementsandpressreleases/108thcongress/04-03-17lamartin.html> (providing general overview of the state of U.S. UAV programs).

⁴⁴ See Brzezinski, *supra* note 40 (discussing Predators firing missiles at a convoy in Afghanistan and anti-aircraft batteries in Iraq) and Kilian, *supra* note 41 (discussing Predator being used to kill six Al-Qaeda terrorists in Yemen).

⁴⁵ Justin Ewers, *2003: The Next Frontier*, U.S. NEWS & WORLD REPORT, Jul. 21, 2003, at 45.

⁴⁶ Brzezinski, *supra* note 40. (20 Apr 03).

⁴⁷ *War From 60,000 Feet*, AVIATION WK. & SPACE TECH., Sep. 8, 2003, available at 2003 WL 63473518. UAVs could be used when line-of-sight access is needed to penetrate computer networks through a microwave antenna or air defense radar. *Id.*

to spend billions of dollars to achieve it.⁴⁸ Two Army programs involving unmanned ground combat vehicles include the Stryker combat vehicle and the Future Combat System (hereinafter FCS). The Stryker combat vehicle, which may become the the focal point for the Army to reorganize around, will be produced in manned and unmanned versions.⁴⁹ The unmanned version will contain an autonomous navigation system and be connected to a command center that can control the vehicle if encounters problems.⁵⁰ The FCS is the Army's top procurement priority.⁵¹ The FCS involves creating at least three UGVs that between them will carry supplies, perform surveillance and intelligence missions,

⁴⁸ See Lane Harvey Brown, *Tireless Workers for Dangerous Jobs; Robotics Making Strides On and Off the Battlefield*, RECORD (Bergen County, N.J.), Feb. 10, 2004, at Z13 (discussing the Department of Defense's goal and how DoD has already spent 27.6 billion dollars for researching, developing, and demonstrating unmanned technologies) and Mike Toner, *Robots Far From Leading the Fight; Machines with Smarts Needed on Front Lines*, ATLANTA J.-CONST., Mar. 14, 2004, at 3B (discussing the goal set by Congress and how the Army is planning on spending almost fourteen billion dollars over the next five years on robotic and related systems).

⁴⁹ See Frank Oliveri, *At Enormous Cost, the New Look Army will be Bullet-proof and Remote Controlled*; GOLD COAST BULLETIN (Australia), Mar. 13, 2004, and Andrea Shalal-Esar & Justin Pope, *Military Technology; War Without Death*, ADVERTISER (Australia), Feb. 8, 2003, at 29.

⁵⁰ Brown, *supra* note 48.

⁵¹ Darrell Hassler & Tony Capaccio, *GAO Hoists Red Flag Over Costly Boeing Army Project*, SEATTLE TIMES, Apr. 2, 2004. The budget for the entire FCS project is estimated at over ninety-two billion dollars by 2020, making it the second largest ongoing military procurement.

and engage in combat.⁵² The Marines are developing UGVs to perform similar missions.⁵³ While UGVs are primarily still in the development stage, they have received limited use from United States forces in Afghanistan and Iraq.⁵⁴

Unmanned surface and subsurface vessels are planned as well. The Navy has developed and deployed for testing the Spartan, a fast armed boat with a range of up to a thousand

⁵² Roxana Tiron, *Lack of Autonomy Hampering Progress of Battlefield Robots*, NAT'L DEF., May 1, 2003, at 33. These three unmanned vehicles are: the Multifunctional Utility Logistics Equipment, a 2.5 ton reconnaissance and transport/supply vehicle; the Armed Reconnaissance Vehicle, a six ton vehicle armed with missiles and a gun; and the Soldier Unmanned Ground Vehicle for reconnaissance and surveillance. The Defense Advanced Research Projects Agency maintains a website with information about the FCS at <http://www.darpa.mil/tto/PROGRAMS/fcs.html>.

⁵³ Toner, *supra* note 48. The Marines are developing a small thirteen lb. robot called the Dragon Runner to perform surveillance missions and a larger vehicle named the Gladiator that could be armed and used for scouting and identifying targets. See *id.* and Byron Spice, *Marines Seeking a Few Good Robots*, SCRIPPS-HOWARD NEWS SERVICE, May 29, 2003, available at LEXIS, News Library, SCHWRD File.

⁵⁴ *One of Their Own Robots Blown Up- They're Thrilled*, CANBERRA TIMES, Apr. 19, 2004, at A13. Fifty to one hundred PackBots are being used in Iraq and Afghanistan for tasks such as battlefield reconnaissance and handling explosives.

miles that would be armed with missiles.⁵⁵ Underwater unmanned vehicles are more difficult to develop because of the technical challenges presented when operating underwater, but they do exist.⁵⁶ A UUV was used in Iraq to look for mines in the port at Um Qasar.⁵⁷ Other UUVs are being developed to engage in intelligence and demining operations and future Navy ships are being designed to carry them.⁵⁸

This interest in unmanned vehicles is not limited to the

⁵⁵ See *Fiscal 2005 Budget: Terrorism Defense Plans: Hearing Before the Subcomm. on Terrorism, Unconventional Threats and Capabilities of the House Comm. on the Armed Services*, 108th Cong. (2004) (testimony of Rear Admiral Jay M. Cohen, U.S. Navy, Chief of Naval Research) (noting that a Spartan USV is currently deployed to the Middle East) available at <http://armedservices.house.gov/openingstatementsandpressreleases/108thcongress/04-03-25cohen.html> and Roxana Tiron, *High-speed Unmanned Craft Eyed for Surveillance Role; Under Development for Navy*, NAT'L DEF., May 1, 2002, at 27 (discussing range, payload, and potential missions of Spartan).

⁵⁶ *Fiscal Year 2005 Budget Request for Navy Research and Development, Transformation and Future Navy Capabilities: Hearing Before the Subcomm. on Projection Forces of the House Comm. on the Armed Services* (2004) (testimony of Rear Admiral Jay Cohen, Chief, Naval Research) available at <http://armedservices.house.gov/openingstatementsandpressreleases/108thcongress/04-03-11young.html>.

⁵⁷ *Id.*

⁵⁸ Robert Little, *Expanding Missions for Military's Drones*, BALTIMORE SUN, Feb. 2., 2003, at 1D. See also J.R. Wilson, *Virginia-class Submarines Usher in a New Era in Undersea Electronics*, MIL. & AEROSPACE ELECTRONICS, Jan. 1, 2004 (noting new Virginia-class submarines have a communications system designed to communicate with UUVs).

United States. Countries such as Russia,⁵⁹ China,⁶⁰ France,⁶¹ Israel,⁶² Australia,⁶³ the United Kingdom,⁶⁴ and India⁶⁵ have established or are developing their own capabilities in unmanned vehicles. At least thirty-nine countries have developed 425 different UAV systems.⁶⁶ These UAVs have been employed for decades, with two examples including Israel using UAVs to help

⁵⁹ Nikolai Khorunzhii, *The Skat Took Off and Hovered Over the Enemy*, IZVESTIA (Moscow), Apr. 7, 2004, at 6 (providing overview of extensive Soviet and Russian use of UAVs).

⁶⁰ Linda de France, *China Believed Progressing Toward UCAV Development*, AEROSPACE DAILY, Dec. 12, 2000, at 397.

⁶¹ Christina Mackenzie, *French UAV Shares Airspace with Airbus*, FLIGHT INT'L, Dec. 16, 2003, at 22 (indicating France has completed development of its second-generation UAV).

⁶² Hilary Leila Krieger, *The Creation Story*, JERUSALEM POST, Jul. 11, 2003, at 12. Israel has developed its own UAVs and sold them, in turn, to at least twenty-six countries. *Id.*

⁶³ See Ben Woodhead, *Underwater Vehicles on a Virtual Battlefield*, AUSTRALIAN FIN. REV., Feb. 6, 2004, at 16 (discussing development of UUVs by Australian Defence Force) and John Kerin, *Pilotless Spy Planes Prove Their Worth*, AUSTRALIAN, Jun. 20, 2003, at 26 (indicating expectation Australia will buy a range of UAVs).

⁶⁴ John Fricker, *MOD Shortlists NG, Thales for Watchkeeper UAV Program*, AEROSPACE DAILY, Feb. 10, 2003, at 3 (discussing 1.3 billion dollar UAV program). See also Rich Tuttle, *'Robust' Approach to Watchkeeper Backed by Parliament Committee*, AEROSPACE DAILY, Mar. 18, 2004, at 4. During the 2003 Iraq conflict, the British deployed 89 Phoenix UAVs, twenty-three of which, in the course of flying 138 missions, were destroyed. *Id.*

⁶⁵ Bulbul Singh, *India to Produce Israeli UAVs*, AEROSPACE DAILY, Jan. 15, 2004, at 4. India has deployed 150 UAVs and wants to acquire in excess of 250 more. *Id.*

⁶⁶ *Nonproliferation: Assessing Missile Technology Export Controls: Hearing Before the Subcomm. on Nat'l Security, Emerging Threats, and Int'l Relations of the House Gov't Reform Comm.*, 108th Cong. (2004) (testimony of Lieutenant General Tome Walters, Jr., Def.

Security Cooperation Agency) printed in FDCH POL. TRANSCRIPTS, 9 Mar. 2004, available at LEXIS, News Library, POLTRN File.

destroy Syrian artillery in Lebanon in 1982⁶⁷ and Pakistan sending Chinese-made UAVs into India to perform reconnaissance in 2002.⁶⁸

Several factors drive this interest in unmanned vehicles. They can 1) reduce casualties, 2) be less expensive to build and operate than manned vehicles, and 3) offer capabilities manned vehicles do not possess. Unmanned vehicles can reduce casualties by replacing manned systems performing hazardous combat related duties such as attacking anti-aircraft batteries, destroying mines, and resupplying troops in the field. When an unmanned vehicle is destroyed, the only damage is to equipment and casualty averse states find this attractive.⁶⁹

Unmanned vehicles are less expensive to build and operate than their manned counterparts because they do not need to provide space, protection, or life support for a crew.⁷⁰ In addition to the initial savings when making UVs, training and maintenance costs may also be lowered. The X-45 UCAV bomber illustrates the potential for savings. Each X-45 will cost from

⁶⁷ U.S. GEN. ACCOUNTING OFFICE, GAO-04-342, IMPROVED STRATEGIC PLANNING CAN ENHANCE DOD'S UNMANNED AERIAL VEHICLES EFFORTS (2004) at 4, available at <http://www.gpoaccess.gov/gaoreports/index.html>.

⁶⁸ *Govt Clears Induction of LLTRs to Screen Air Intrusions*, PRESS TRUST OF INDIA, Dec. 8, 2002, available at LEXIS, News Library, PTI File.

⁶⁹ See Pope, *supra* note 49; Brown, *supra* note 48; and Brzezinski, *supra* note 40.

⁷⁰ Brzezinski, *supra* note 40. See also David A. Fulghum & Robert Wall, *Small, Fast, Cheap*, AVIATION WK. & SPACE TECH., Feb. 16, 2004, at 24 (discussing cost benefits driving Israeli and Indian forces to greater use of UAVs).

15 to 20 million dollars, one-third to one-half of what a new manned combat aircraft costs.⁷¹ The X-45 can be stored for up to twenty years in its own climate controlled facility, reducing the need for maintenance.⁷² The expense of training pilots, which includes pilots continuously needing to fly training missions to keep their skills intact, can also be avoided.⁷³ Manpower costs can be reduced even further because one operator can simultaneously control up to four X-45s.⁷⁴

Finally, unmanned vehicles can offer superior performance because they are not subject to limitations imposed by the presence of a crew. Unmanned vehicles can engage in long missions without concern about fatigue and engage in maneuvers such as rapid acceleration that are beyond the tolerance of a human.⁷⁵

III. The Treatment of Civilian Employees and Contractors Under the Law of War

A. The Divisions Between Combatants, Noncombatants, and Civilians

The modern battlefield presents a taxonomic challenge.

⁷¹ Brzezinski, *supra* note 40.

⁷² *Id.*

⁷³ *Id.* This savings may not be universal, however, as in a few countries, such as Russia, pilot training may be relatively inexpensive. See Khorunzhii, *supra* note 59.

⁷⁴ Brzezinski, *supra* note 40.

⁷⁵ *Id.* See also Kilian, *supra* note 41.

Combatants, unlawful combatants, noncombatants, civilians accompanying the armed forces, and civilians from the general population may all be present and all are treated differently under the law of war. Understanding the meaning of these terms makes it possible to understand the status of civilian contractors and employees under the law of war.

1. Combatants Defined

Under the modern conception of the law of war, almost everyone involved in an international armed conflict is classified as having either of two primary statuses: combatant or civilian.⁷⁶ Combatants are entitled to participate directly in hostilities while civilians can not.⁷⁷ Beyond this fundamental distinction, different protections and responsibilities belong to the members of each category.⁷⁸

While war has been a constant presence in human history, the notion of separating out combatants from civilians is of surprisingly recent vintage. Soldiers and sailors existed before the nineteenth century, but not until then did scholars

⁷⁶ Knut Ipsen, *Combatants and Non-Combatants*, in *THE HANDBOOK OF HUMANITARIAN LAW IN ARMED CONFLICTS* 65, 65 (Dieter Fleck ed., 1995). There is a third primary status for medical and religious personnel. *Id.* at 69.

⁷⁷ See Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, Dec. 12, 1977, arts. 43 and 51, 1125 U.N.T.S. 3 (hereinafter Protocol I). See also A. P. V. ROGERS, *LAW ON THE BATTLEFIELD* 8 (1996).

⁷⁸ See generally Ipsen, *supra* note 76.

begin to write about combatants as the class of people entitled to take part in combat.⁷⁹

The first international effort at forming a definition of combatant occurred in the Brussels Conference of 1874.⁸⁰ This definition was adapted with modifications during the Hague Peace Conferences of 1899 and 1907 and codified in the Hague Convention Respecting the Laws and Customs of War on Land (hereinafter Hague Convention).⁸¹

The Hague Convention provides a two-part test for determining combatant status.⁸² The first part requires a combatant to be part of the armed forces or of a militia or volunteer corps. Such a requirement reflects the fact that a state involved in an armed conflict acts through its armed forces however categorized.⁸³

The second part of the test contains four criteria that must be met to achieve combatant status. Potential combatants must:

- 1) be commanded by a person responsible for his subordinates
- 2) have a fixed distinctive emblem recognizable at a distance

⁷⁹LESLIE C. GREEN, THE CONTEMPORARY LAW OF ARMED CONFLICT 104-5 (2nd ed. 2000).

⁸⁰ *Id.* See also D. SCHINDLER & J. TOMAN, THE LAWS OF ARMED CONFLICT 22-34 (1988) (reprinting the provisions adopted by the Brussels Conference). The Brussels Conference articles are also available at <http://www.icrc.org/ihl.nsf/WebFULL?OpenView>.

⁸¹ *Id.* See also 1907 Hague Convention No. IV Respecting the Laws and Customs of War on Land, Oct. 18, 1907, 36 Stat. 2277, 205 Consol. T.S. 277 [hereinafter Hague Convention].

⁸² Annex to the Hague Convention, *supra* note 81, at art. 1.

⁸³ Ipsen, *supra* note 76, at 71.

- 3) carry arms openly; and
- 4) conduct their operations in accordance with the laws and customs of war.⁸⁴

The Hague Convention also provides that a state's armed forces may consist of combatants and noncombatants.⁸⁵

Over forty years passed before the coming into force of the next significant treaty dealing with combatants-- the Geneva Convention Relative to the Treatment of Prisoners of War (hereinafter Geneva Convention III).⁸⁶ This treaty, one of a series of four treaties concerning the law of war drafted under the auspices of the International Committee of the Red Cross, was signed in Geneva in 1949.⁸⁷ Geneva Convention III, as may be surmised from the title, deals with the protection to be afforded prisoners of war (hereinafter POWs). Because POWs are, in most circumstances, simply combatants who fall into the hands of the enemy, the definition of who is entitled to POW status is all but synonymous with who is a combatant.⁸⁸ Geneva Convention III adopted the Hague Convention definition of combatant with very little change.⁸⁹

By the time of the 1970s, enough states felt the need to update the 1949 Geneva Conventions that they met in a conference

⁸⁴ Annex to the Hague Convention, *supra* note 81, at art. 1.

⁸⁵ Annex to the Hague Convention, *supra* note 81, at art. 3.

⁸⁶ Geneva Convention Relative to the Treatment of Prisoners of War, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135 [hereinafter Geneva Convention III].

⁸⁷ W. Hays Park, *Air War and the Law of War*, 32 A.F. L. REV 1, 55-57 (1990).

⁸⁸ Ipsen, *supra* note 76, at 81.

⁸⁹ See Geneva Convention III, *supra* note 86, at art. 4(A)(2).

that resulted in the adoption of two protocols, the first of which was Protocol I Additional to the Geneva Convention of 1949 (hereinafter Protocol I).⁹⁰ Protocol I supplements and updates the 1949 Geneva Conventions.⁹¹ Protocol I has been ratified by over 160 states⁹² and much of Protocol I is considered a codification of existing international law.⁹³

Two aspects of the definition of combatant in Protocol I have provoked debate. First, members of national liberation movements can qualify for combatant status. Second, in some circumstances Protocol I appears to blur the distinction between civilian and combatant status. Analyzing these issues begins with the definition of combatant in Protocol I:

The armed forces of a Party to a conflict consist of all organized armed forces, groups and units which are under a command responsible to that Party for the conduct of its subordinates, even if that Party is

⁹⁰ See GREEN, *supra* note 79, at 50.

⁹¹ See generally Christopher Greenwood, *A Critique of the Additional Protocols to the Geneva Conventions of 1949*, in THE CHANGING FACE OF CONFLICT AND THE EFFICACY OF INT'L LAW, 3-20 (Helen Durham and Timothy L.H. McCormack, eds. 1999).

⁹² The International Committee of the Red Cross maintains a list of countries that have ratified Protocol I. By count of the author, 162 countries have ratified Protocol I as of May 7, 2004. An additional five states, including the U.S., have signed but not ratified it. This list is available at <http://www.icrc.org/ihl.nsf/WebNORM?OpenView> (last visited May 7, 2004).

⁹³ See GREEN, *supra* note 79, at 51 (discussing how the Institute of International Law prepared a resolution that embodied what the Institute considered to be customary international law and significantly influenced the terms of Protocol I), and INGRID DETTER, *THE LAW OF WAR* 143 (2nd ed. 2000) (arguing that states that have not ratified Protocol I may be bound by the many parts of it that reflect existing law).

represented by a government or an authority not recognized by an adverse Party. Such armed forces shall be subject to an internal disciplinary system which, inter alia, shall enforce compliance with the rules of international law applicable in armed conflict.⁹⁴

The impetus for this expansion was the interest of many Third World countries in having the legitimacy of armed conflict with colonial powers recognized.⁹⁵ This definition does broadly extend eligibility for combatant status to nonstate parties, to include liberation movements, and has, accordingly, been controversial.⁹⁶ A particular concern has been that this article offers protection to terrorist groups.⁹⁷ The better argument, however, supports the conclusion that terrorists are not entitled to combatant status because the traditional criteria required for combatant status spelled out in Geneva Convention III still apply.⁹⁸ As one commentator has stated, "Protocol I does not really reduce the four conditions in the Geneva Conventions but rephrases them."⁹⁹ Protocol I, therefore, requires adherence to

⁹⁴ Protocol I, *supra* note 77, at art. (43)(1).

⁹⁵ Greenwood, *supra* note 91, at 6.

⁹⁶ See Abraham D. Sofaer, *AGORA: The U.S. Decision Not to Ratify Protocol I to the Geneva Conventions on the Protection of War Victims (Cont'd)*, AM. J. INT'L L. 784, 785-86 (1988) (discussing U.S. concerns over granting irregulars the status of combatants). See also Greenwood, *supra* note 91, at 16-18.

⁹⁷ See Sofaer, *supra* note 96, at 785-86 and Douglas J. Feith, *Law in the Service of Terror*, 1 NAT'L INTEREST 36 (1985).

⁹⁸ Hans-Peter Gasser, *The U.S. Decision not to Ratify Protocol I to the Geneva Conventions on the Protection of War Victims: an Appeal for Ratification by the United States*, 81 AM. J. INT'L L. 912, 918-23 (1987). Gasser argues terrorists are not protected because they must belong to the armed forces, which, in turn, must comply with the laws of war or lose their status under Article 43 of Protocol I. *Id.*

⁹⁹ DETTER, *supra* note 93, at 142.

the law of war for combatant status, which means terrorists will not qualify as combatants.¹⁰⁰

The second contested issue concerning combatant status involves Article 44 of Protocol I, which appears to allow combatants to switch back and forth between civilian and combatant status. Article 44 states:

[C]ombatants are obliged to distinguish themselves from the civilian population while they are engaged in an attack or in a military operation preparatory to an attack. Recognizing, however, that there are situations in armed conflicts where, owing to the nature of the hostilities an armed combatant cannot so distinguish himself, he shall retain his status as a combatant, provided that, in such situations, he carries his arms openly: (a) during each military engagement, and (b) during such time as he is visible to the adversary while he is engaged in a military deployment preceding the launching of an attack in which he is to participate.¹⁰¹

The language in this article suggests that combatants can carry concealed weapons while wearing civilian clothes, only brandishing their weapons as they carry out an attack. As a result, concern has been expressed that this article endangers civilians by breaking down the distinction between civilians and combatants.¹⁰² The more logical interpretation of Article 44,

¹⁰⁰ See Gasser, *supra* note 98, at 918-23.

¹⁰¹ Protocol I, *supra* note 77, at art. 44(3).

¹⁰² See Sofaer, *supra* note 96.

however, is that it is meant to be narrowly construed.¹⁰³ The requirements from Protocol I Article 43 must still be met and weapons must be carried openly well before any attack begins.¹⁰⁴

Even after the advent of Protocol I, the definition of a combatant today is still almost completely derived from the definition of a combatant in the Hague Convention from 1907. The definition of a combatant has changed little in the last hundred years, despite the significant changes in the manner in which warfare is conducted.

Two aspects of combatant status are of particular importance. First, combatants are authorized to take direct part in hostilities.¹⁰⁵ Second, as has been alluded to, combatants are entitled to prisoner of war status if captured.¹⁰⁶ POWs receive a variety of protections, but one of particular relevance is that POWs may not be punished for taking part in hostilities as long as the requirements of the law of war have

¹⁰³ See Greenwood, *supra* note 91, at 17-18. The official commentary to Article 44 makes clear that the criteria for POW (and hence combatant) status are still retained. INT'L COMM. OF THE RED CROSS, COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, 522 (Y. Sandoz, C. Swinarski, B. Zimmerman, eds., Geneva, 1987) [hereinafter PROTOCOL I COMMENTARY].

¹⁰⁴ Gasser, *supra* note 98, at 920 (indicating the generally accepted rule appears to be that weapons should be carried openly once a combatant makes any movement toward a place from where an attack is to be launched).

¹⁰⁵ Protocol I, *supra* note 77, at art. 43(2). See also Ipsen, *supra* note 76, at 67.

¹⁰⁶ See Geneva Convention III, *supra* note 86, at art. 4(A).

been met.¹⁰⁷ Unlawful combatants, who are people who do not have combatant status but take direct part in hostilities, receive no such protection and may be criminally prosecuted for their actions.¹⁰⁸

There are at least three situations where civilians can be considered lawful combatants: the *levee en masse*, police agencies incorporated into the armed forces, and as commanders. The *levee en masse* consists of a spontaneous uprising against an enemy before a territory is occupied.¹⁰⁹ As long as the participants in the *levee en masse* obey the law of war and have not had time to organize themselves into a militia, they are entitled to combatant and, if captured, POW status.¹¹⁰

Civilian paramilitary and law enforcement agencies may be incorporated into the armed forces and receive combatant status upon notice to the other parties to the conflict.¹¹¹ The mechanism for making this notification is by submitting written notice to the government of Switzerland.¹¹²

Finally, the Commentary to Geneva Convention III indicates

¹⁰⁷ Ipsen, *supra* note 76, at 68 (discussing how POWs cannot be punished for the 'mere fact of fighting' although they are still liable for criminal acts they commit outside the scope of their protected combat activities).

¹⁰⁸ *Id.*

¹⁰⁹ See Geneva Convention III, *supra* note 86, at art. 4(A)(6).

¹¹⁰ Ipsen, *supra* note 76, at 79.

¹¹¹ Protocol I, *supra* note 77, at art. 43(3).

¹¹² See PROTOCOL I COMMENTARY, *supra* note 103, at 517, 1113 (discussing how notice can be made through the depositary, which is the Swiss government).

civilians may lawfully lead partisan combat units.¹¹³ Presumably, these leaders would then be entitled to the same combatant status as the partisans they lead.

2. Noncombatants Defined

Noncombatant and civilian are terms that may be used interchangeably in common parlance but under the law of war they have distinct meanings. Noncombatants are members of the armed forces¹¹⁴ who have primary status as combatants, not civilians, but do not take part in hostilities because their own state prohibits them from doing so.¹¹⁵ Since noncombatant status derives only from the decision of their state, not the requirements of the law of war, noncombatants are, in fact, treated as combatants under the law of war.¹¹⁶ They may be targeted as combatants and noncombatants may take part in hostilities without becoming unlawful combatants.¹¹⁷ If captured,

¹¹³ INT'L COMM. OF THE RED CROSS, COMMENTARY: III GENEVA CONVENTION RELATIVE TO THE TREATMENT OF PRISONERS OF WAR 59 (Jean de Preux, ed., 1960) [hereinafter GENEVA CONVENTION III COMMENTARY].

¹¹⁴ Annex to the Hague Convention, *supra* note 81, at art. 3.

¹¹⁵ Ipsen, *supra* note 76, at 84. Ipsen offers, as historical examples of such noncombatants, members of legal services and quartermasters. *Id.* at 82.

¹¹⁶ *Id.* at 84.

¹¹⁷ *Id.* at 85, 90-91. See also PROTOCOL I COMMENTARY, *supra* note 103, at 515.

noncombatants are entitled to POW status.¹¹⁸

Medical and religious personnel may be referred to as noncombatants but that misconstrues their actual status because they do not have primary status as combatants. They have primary status as medical and religious personnel.¹¹⁹ While noncombatants do not fight because of the domestic decision of their state, the law of war prohibits medical and religious personnel from engaging in combat.¹²⁰

3. Civilians Defined

Protocol I defines civilians as those persons who are not

¹¹⁸ Ipsen, *supra* note 76, at 84. A good example of how the distinction between noncombatants and civilians can become blurred is the civilian air reserve technician program used by the U.S. Air Force. An air reserve technician (ART) is a civilian employee who is a member of the Air Force Reserves or Air National Guard. ARTS typically maintain and operate military aircraft. The ART must, in many circumstances, wear his military uniform even when reporting to work in civilian status. Any observer seeing uniformed ART personnel working on military aircraft would logically assume they are combatants, although they are actually civilians under the law of war who may not engage in combat until converted to active duty status. See AIR FORCE INSTRUCTION 36-108, AIR RESERVE TECHNICIAN PROGRAM (2002) (providing details of ART program) and AIR FORCE INSTRUCTION 36-2903, DRESS AND PERSONAL APPEARANCE OF AIR FORCE PERSONNEL, 124 (2002) (concerning wear of uniform by ART personnel when in civilian status).

¹¹⁹ Ipsen, *supra* note 76, at 89 (discussing the special primary status medical and religious personnel have under the Geneva Conventions).

¹²⁰ *Id.* at 90-92 (noting medical personnel may be armed and can use force to protect themselves and their patients while religious personnel should not be armed but can defend themselves when attacked).

part of the armed forces.¹²¹ When there is ambiguity over whether someone is a combatant or civilian, they should be considered a civilian.¹²² This definition of civilian includes civilians who accompany the armed forces (hereinafter accompanying civilians).¹²³ Simply performing work for the armed forces is not sufficient to be considered an accompanying civilian: only those civilians who have been authorized to accompany the armed forces and received an identification card can be considered civilians accompanying the armed forces.¹²⁴

While accompanying civilians have civilian status, they do receive different treatment from other civilians because, unlike almost anyone else with civilian status, they are entitled to

¹²¹ Protocol I, *supra* note 77, at art. 50.

¹²² *Id.*

¹²³ *Id.* Protocol I provides in art. 50 that a "civilian is any person who does not belong to one of the categories of persons referred to in Article 4(A)(1), (2), (3), and (6) of the Third Convention and in Article 43 of this Protocol." Civilians accompanying the armed forces are referred to in Geneva Convention art. 4(A)(4), which states, "Persons who accompany the armed forces without actually being members thereof, such as civilian members of military aircraft crews, war correspondents, supply contractors, members of labour units or of services responsible for the welfare of the armed forces, provided that they have received authorization, from the armed forces which they accompany, who shall provide them for that purpose with an identity card similar to the annexed model." Geneva Convention III, *supra* note 86, at art. 4(A)(4).

¹²⁴ See DEPARTMENT OF DEFENSE INSTRUCTION 1000.1, IDENTITY CARDS REQUIRED BY THE GENEVA CONVENTIONS, para. 5.2 (1974) for an example of the procedures used for issuing identification cards to civilians accompanying the armed forces to meet the requirements of the Geneva Conventions. Cards are issued to emergency essential DoD employees and contractors who may accompany U.S. military forces to areas of conflict.

POW status when captured.¹²⁵ However, like other civilians, civilian employees and contractors who take part in hostilities will be considered unlawful combatants.¹²⁶ Civilian employees and contractors also face the risk of losing the protection from attack civilians are owed under the law of war because of their proximity to military objectives.¹²⁷

While the law of war does not draw a distinction between civilian employees and contractors, they have different relationships with the armed forces. Civilian employees are hired and supervised by the armed forces and have an employment relationship with them.¹²⁸ Contractors work independently or for a private company and have a contractual relationship with the armed forces.

4. Mercenaries Defined

States have a long tradition of employing mercenaries.¹²⁹ Mercenaries are generally considered to be professional soldiers who serve for money, not loyalty, typically in the service of a

¹²⁵ Geneva Convention III, *supra* note 86, at art. (4)(4). See also Ipsen, *supra* note 76, at 95.

¹²⁶ See Ipsen, *supra* note 76, at 95.

¹²⁷ See *id.* at 65 and GREEN, *supra* note 79, at 229.

¹²⁸ See DEPARTMENT OF DEFENSE DIRECTIVE 1400.31, SUBJECT: DOD CIVILIAN WORK FORCE CONTINGENCY AND EMERGENCY PLANNING AND EXECUTION para. 3.1 (1995).

¹²⁹ See P.W. SINGER, THE RISE OF THE PRIVATIZED MILITARY INDUSTRY 20-39 (2003) and Todd S. Millard, *Overcoming Post-Colonial Myopia: A Call to Recognize and Regulate Private Military Companies*, 176 MIL. L. REV. 1 (2003), for a brief history of the use of mercenaries.

foreign country.¹³⁰ Prior to the 1970s, there was no prohibition in international law against their use and mercenaries could qualify for combatant status if they met the requisite combatant criteria.¹³¹

By the 1960s, many countries undergoing decolonization or experiencing national liberation movements, particularly in Africa, became concerned with the use of mercenaries. These countries successfully lobbied to have a ban on mercenaries placed into Protocol I, where Article 47 provides that:

A mercenary is any person who:

- (a) is specially recruited locally or abroad in order to fight in an armed conflict;
- (b) does, in fact, take a direct part in the hostilities;
- (c) is motivated to take part in the hostilities essentially by the desire for private gain and, in fact, is promised, by or on behalf of a Party to the conflict, material compensation substantially in excess of that promised or paid to combatants of similar ranks and functions in the armed forces of that Party;
- (d) is neither a national of a Party to the conflict nor a resident of territory controlled by a Party to the conflict;
- (e) is not a member of the armed forces of a Party to the conflict; and
- (f) has not been sent by a State which is not a Party to the conflict on official duty as a member of its armed forces.¹³²

¹³⁰ Mercenary is defined in WEBSTER'S NINTH COLLEGIATE DICTIONARY 742 (1991) as, "one that serves merely for wages, especially a soldier hired into foreign service." See also Millard, *supra* note 129, at 6.

¹³¹ Richard R. Baxter, *The Duties of Combatants and the Conduct of Hostilities*, in INTERNATIONAL DIMENSIONS OF HUMANITARIAN LAW, (Jiri Toman, ed., 1988) (noting neither the Hague Regulations of 1907 or the Geneva Conventions of 1949 contained any prohibitions against the use of mercenaries).

¹³² Protocol I, *supra* note 77, at art. 47.

These requirements are sequential and cumulative: all must be met for someone to be considered a mercenary.¹³³

This definition is so narrowly drawn that few people are likely to fall within its terms.¹³⁴ Proving someone fights for material gain as opposed to an ideological, moral, or religious motivation may be difficult.¹³⁵ In addition, the prohibition can be circumvented easily by a state incorporating potential mercenaries into its armed forces, as the United Kingdom has done with the Nepalese Gurkhas serving in its army.¹³⁶

The main effect of being a mercenary under the Protocol I definition is becoming ineligible for lawful combatant or POW status.¹³⁷ As such, a mercenary engaging in combat is an unlawful combatant who can be held criminally liable for his actions.

¹³³ Baxter, *supra* note 131, at 114.

¹³⁴ Greenwood, *supra* note 91, at 6. The unlikelihood of being deemed a mercenary under this definition has been captured by one commentator as follows: "any person who cannot avoid being characterized as a mercenary under this definition deserves to be shot and his defence lawyer with him." GEOFFREY BEST, HUMANITY IN WARFARE, 374-5 (1980).

¹³⁵ HILAIRE MCCOUBREY, INTERNATIONAL HUMANITARIAN LAW: MODERN DEVELOPMENTS IN THE LIMITATION OF WARFARE 145-48 (2d ed. 1998). Examples of soldiers fighting for such moral or ideological reasons would include U.S. citizens fighting for Allied forces in the First and Second World Wars before the U.S. entered the war. *Id.*

¹³⁶ *Id.* See also UNITED KINGDOM FOREIGN AND COMMONWEALTH OFFICE, PRIVATE MILITARY COMPANIES: OPTIONS FOR REGULATION 2002, 7 (London: The Stationery Office, 2002) [hereinafter UK GREEN PAPER] available at www.fco.gov.uk/Files/kfile/mercenaries,0.pdf (discussing example of Papua New Guinea arranging for mercenaries it hired to become special constables).

¹³⁷ Article 47 of Protocol I, *supra* note 77, states, "A mercenary shall not have the right to be a combatant or a prisoner of war."

While not entitled to POW status, mercenaries are still entitled to the minimal due process standards guaranteed civilians in Geneva Convention IV and Article 75 of Protocol I.¹³⁸

There have been several attempts subsequent to Protocol I to further regulate mercenaries, although these have not met with widespread success.¹³⁹ The end result of all these regulatory efforts is a limited ban on the small category of mercenaries who can fit within the parameters of the Protocol I definition. This lack of regulation does not mean, however, that mercenaries can engage in combat. Unless they are incorporated into a state's armed forces they remain civilians who may not engage in combat.¹⁴⁰ Signing a contract with a state is, by itself, insufficient to convert a civilian to a combatant.¹⁴¹

B. Determining What Constitutes Direct Participation in Hostilities

Consider a helicopter gunship attacking enemy soldiers during the course of the battle. An UAV circling above the

¹³⁸ GREEN, *supra* note 79, at 115.

¹³⁹ See P.W. Singer, *War, Profits, and the Vacuum of Law: Privatized Military Firms and International Law*, 42 COLUM. J. TRANSNAT'L LAW 521, 528-32 (2004), discussing two conventions and their limitations: the Convention for the Elimination of Mercenarism in Africa established by the Organization of African Unity in 1977 and the International Convention Against the Recruitment, Use, Financing and Training of Mercenaries established by the U.N. in 1989.

¹⁴⁰ Ipsen, *supra* note 76, at 69.

¹⁴¹ *Id.*

battlefield operated by a civilian employee from a remote location provides targeting information to the helicopter. A crewman onboard the helicopter uses this information to direct the fire of a machine gun toward enemy soldiers on the ground. The helicopter receives minor damage from small arms fire and lands a short distance from the battlefield. Civilian contractors are brought to the helicopter to perform emergency repairs on it, allowing the helicopter to return to the battlefield. In this scenario the crewman firing the machine gun is clearly a combatant, but the status of the contractors and employees is more ambiguous as reasonable arguments could be made for and against the proposition they directly participated in hostilities and so lost their status as civilians.

Combatants are entitled to engage in combat, that is, to participate directly in hostilities.¹⁴² This rule is codified in Article 43(2) of Protocol I.¹⁴³ The logical corollary of this prohibition is that civilian employees and contractors can actively engage in noncombat activities, i.e., those activities falling short of direct participation in hostilities, without becoming unlawful combatants.¹⁴⁴ Before the full distinction between combatants and civilians can be discerned, therefore, the difference between combat and noncombat activities must be determined.

¹⁴² See Hans-Peter Gasser, *Protection of the Civilian Population*, in *THE HANDBOOK OF HUMANITARIAN LAW IN ARMED CONFLICTS* 209, at 210 (Dieter Fleck ed., 1995).

¹⁴³ Protocol I, *supra* note 77, at art. 43(2).

¹⁴⁴ *Id.* at art. 51. See also Gasser, *supra* note 142, at 232.

Military operations depend on a wide range of activities from firing a gun to providing intelligence about enemy targets to making bullets. Where the law of war requires the drawing of a line to distinguish between direct and indirect participation in hostilities is unclear. The Commentary to Protocol I suggests a narrow interpretation of direct participation in hostilities, limiting it to those activities where there is a, "direct causal relationship between the activity engaged in and the harm done to the enemy at the time and the place where the activity takes place."¹⁴⁵

The Commentary to Article 77 of Protocol I provides a further gloss to what constitutes direct participation in hostilities. This article, which deals with the obligation of states to keep children from direct participation in hostilities, lists examples of activities which do not constitute direct participation as including, "gathering and transmission of military information, transportation of arms and munitions, [and] provision of supplies."¹⁴⁶ Protocol I, with its Commentary, suggests direct participation is limited to actions that directly cause damage to an enemy's personnel or equipment. This view would include only actions such as planting bombs to destroy an enemy's convoy of trucks or engaging in a

¹⁴⁵ PROTOCOL I COMMENTARY, *supra* note 103, at 516.

¹⁴⁶ *Id.* at 901.

firefightwith enemy soldiers.¹⁴⁷

This restrictive view of what constitutes direct participation in hostilities does not reflect state practice.¹⁴⁸ Between undoubted combat activities described in Protocol I and activities such as feeding and sheltering combatants that are acknowledged as not equating to direct participation in hostilities there is uncertainty.¹⁴⁹ Examples of the type of activity that may cause a civilian to be considered a combatant include intelligence gathering, performing mission-essential

¹⁴⁷ See FRITS KALSHOVEN & LIESBETH ZEGVELD, CONSTRAINTS ON THE WAGING OF WAR: AN INTRODUCTION TO INTERNATIONAL HUMANITARIAN LAW, 99 (2001), available at <http://www.icrc.org/Web/eng/siteeng0.nsf/iwpList526/8DDA382303475B2DC1256C550047B1AA>.

¹⁴⁸ See Jean-Marie Henckaerts, *The Conduct of Hostilities: Target Selection, Proportionality and Precautionary Measures Under International Humanitarian Law*, in PROTECTING CIVILIANS IN 21ST-CENTURY WARFARE 13-14 (Mireille Hector & Martine Jellema, eds., 2001) Henckaerts, and Park, *supra* note 87, at 130-135.

¹⁴⁹ See Henckaerts, *supra* note 148, at 13-14. See also DETTER, *supra* note 93, at 146 ("There is no doubt that there is still confusion as to who is a combatant and who is a civilian as a result of the lack of stringent criteria for qualifications as a combatant.") and Michael N. Schmitt, *The Principle of Discrimination in 21st Century Warfare*, 2 YALE HUM. RTS. & DEV. L.J. 143, 160 (1999) (discussing the blurring between civilians who work for the armed forces and combatants).

work at a military base, or providing logistical support.¹⁵⁰

The lack of certainty over what activities constitute direct participation in hostilities may simply reflect the fact there is no consensus about where to draw the line between combat and noncombat activities. The British government described this difficulty in a policy paper:

The distinction between combat and non-combat operations is often artificial. The people who fly soldiers and equipment to the battlefield are as much a part of the military operation as those who do the shooting. At one remove the same applies to those who help with maintenance, training, intelligence, planning and organisation- each of these can make a vital contribution to war fighting capability. Other tasks such as demining or guarding installations may be more or less distant from active military operations according to the broader strategic picture.¹⁵¹

This language captures an essential point of modern military conflicts, which is that the combatants shooting guns or dropping bombs are only capable of engaging in combat because of the support they have received. While it is easy to label the gun-toting soldier a combatant, it is harder to determine the

¹⁵⁰ See Gasser, *supra* note 142, at 232. "A civilian who . . . gathers information in the area of operations may be made the object of attack. The same applies to civilians who operate a weapons system, supervise such operation, or service such equipment. The transmission of information concerning targets directly intended for the use of a weapon is also considered as taking part in hostilities. Furthermore, the logistics of military operations are among the activities prohibited to civilians." *Id.* (ellipsis added). Park, *supra* note 87, at 118, 134, and note 400, indicates logistical support, intelligence gathering, and being a mission-essential civilian on a military installation make civilians lawful subjects of attack.

¹⁵¹ See UK GREEN PAPER, *supra* note 136, at 8.

status of those who transport him to the battlefield, gather intelligence about the location of enemy military positions, or repair and maintain the sophisticated weapons systems he uses to fight.

Two principles can be extracted from the various views on what constitutes direct participation in hostilities. The first principle is that the closer an activity occurs to the physical location of fighting, the more likely it will be considered combat.¹⁵² This principle captures the idea that activity near the battlefield can usually be more closely linked to the infliction of harm on an enemy. An example of a civilian driving a truck loaded with ammunition illustrates this point. If the civilian is driving the truck in his home country from a munitions factory to a nearby port from where the munitions will be shipped to an area of conflict 4000 miles away, then his transporting the munitions would not normally be considered a combat activity.¹⁵³ Once the ship arrives at its destination, the ammunition is loaded onto a truck and a civilian driver drives the truck to resupply an artillery unit shelling enemy soldiers as part of an ongoing battle. At some point as the truck approaches the battlefield, driving the truck would appear to

¹⁵² See Gasser, *supra* note 142, at 232. The activities Gasser indicates are prohibited to civilians share a nexus of requiring proximity to the area of military operations.

¹⁵³ See ROGERS, *supra* note 77, at 8-9 (1996), discussing a similar hypothetical regarding a civilian truck driver that was also mentioned by Park, *supra* note 87, at 134. See also PROTOCOL I COMMENTARY, *supra* note 103, at 516 (discussing how simply supporting war effort insufficient to lose civilian status).

become a combat activity.¹⁵⁴

This general rule does not, however, provide clear guidance on what locations should be considered so close to fighting as to elevate certain civilian support activities from noncombat to combat participation. Being physically present on the battlefield where fighting is occurring appears to qualify, but beyond that the exact geographic scope where participation in support activities may equate to combat activity has not been decisively determined.¹⁵⁵

The second general rule looks at the nature of the combat-related activity itself and how closely the activity is related to the infliction of violence. This type of rule makes sense because the modern battlefield has been stretched to proportions far beyond what existed a century ago. Just as a sniper firing a bullet a target a mile away is by any definition a combatant, no one would contest that whoever presses the button to launch a missile that travels a thousand miles to hit its target is a combatant. Physical distance from the point of impact is irrelevant because the person launching the missile directly caused the damage caused by the missile.

The rule that participation in activities closely associated with the direct infliction of violence is more likely

¹⁵⁴ ROGERS, *supra* note 77, at 9.

¹⁵⁵ Henckaerts, *supra* note 148, at 13, notes much of the state practice in this area consists of assessing combatant status on a case by case basis or relying on a general proscription against direct participation in hostilities without further defining it.

to be labeled combat explains why activities such as gathering intelligence for targeting purposes and servicing a weapons system may be considered direct participation in hostilities.¹⁵⁶ These activities are indispensable to and closely connected with the infliction of violence. By contrast, other activities, such as providing combatants with food and water, are considered sufficiently removed from the infliction of violence that civilians providing such services to combatants are unlikely to be considered to have taken a direct part in hostilities.¹⁵⁷

The net effect of the unsettled nature of what constitutes combat activity is that while civilian employees and contractors accompanying the armed forces are entitled to status as civilians under the law of war, the range of activities they may lawfully engage in has not been clearly delineated. This ambiguity does not mean civilians are being kept from participating in military operations. Civilian participation and integration into military activities has grown rapidly in recent years. Examination of current civilian involvement in combat activities will indicate how states are interpreting where this line should be drawn in battlefields around the world.

C. Law of War Constraints on the Use of Force Affecting Civilians Accompanying the Armed Forces

States engaging in international armed conflicts are not

¹⁵⁶ See Gasser, *supra* note 142, at 232.

¹⁵⁷ See PROTOCOL I COMMENTARY, *supra* note 103, at 619.

entitled to use force indiscriminately. The three underlying principles of the law of war most directly affecting targeting decisions are military necessity, distinction, and proportionality.¹⁵⁸ Each of these principles works to protect civilians and limit the scope of violence during a conflict.¹⁵⁹

The first restraint a commander must consider when selecting a target for attack is military necessity, which requires limiting attacks to targets of military significance using only those weapons or means needed to achieve military purposes.¹⁶⁰ The purpose of this principle is to ensure that every military action is driven by a military requirement and is intended to subjugate the enemy in the shortest amount of time

¹⁵⁸ ROGERS, *supra* note 77, at 3 (1996). Several additional principles include those of humanity and chivalry. See *id.* at 3, 6.

¹⁵⁹ See generally *id.* at 3-25.

¹⁶⁰ See Burrus M. Carnahan, *Lincoln, Lieber and the Laws of War: The Origins and Limits of the Principle of Military Necessity*, 92 AM. J. INT'L L. 213 (1998) (defining military necessity and discussing its historical evolution). DETTER, *supra* note 93, at 392-98, discusses how military necessity has been used in the past to justify violating the law of war, but this particular use of military necessity appears to have fallen out of favor.

and at the least possible expense of men and materiel.¹⁶¹ Under this principle, acts which lack any direct military purpose, such as indiscriminate bombing of civilian dwellings or food supplies, are prohibited.¹⁶²

This principle can be difficult to apply because it contains subjective elements, particularly when a commander must use his judgment to determine what actions will, in fact, further the purpose of subjugating the enemy in light of the goals of the conflict. While some civilian objects such as museums or churches will never, barring their misuse, be the lawful subject of an attack, the military necessity to attack many objects such as dams or factories may wax and wane during the course of a conflict.¹⁶³

When selecting targets for attack, the principle of

¹⁶¹ ROGERS, *supra* note 77, at 5-6. The definition used by the Air Force, contained in AIR FORCE JUDGE ADVOCATE GENERAL SCHOOL, THE MILITARY COMMANDER AND THE LAW, at Ch. 15, *The Law of Armed Conflict*, available at <http://milcom.jag.af.mil/ch15/loac.htm>, is almost identical. This definition states military necessity, "[p]ermits the application of only that degree of regulated force, not otherwise prohibited by the law of war, required for the partial or complete submission of the enemy with the least expenditure of life, time, and physical resources. Attacks must be limited to military objectives, i.e., any objects which by their nature, location, purpose, or use make an effective contribution to military action and whose total or partial destruction, capture, or neutralization, under the circumstances ruling at the time, offers a definite military advantage. Examples include troops, bases, supplies, lines of communications, and headquarters." *Id.*

¹⁶² ROGERS, *supra* note 77, at 7.

¹⁶³ See Carnahan, *supra* note 160, at 229 (discussing how military necessity for attacking irrigation dams during Korean War grew towards end of conflict and how targets in Vietnam were bombed after peace negotiations broke down in 1972).

distinction prohibits direct attacks on civilians and civilian objects.¹⁶⁴ To achieve this aim, states are under an obligation to distinguish civilians and civilian objects from their military counterparts. This principle has been codified in Articles 48, 51(2), and 52(1) of Protocol I, which require states to avoid targeting civilians and instead, "direct their operations only against military objectives."¹⁶⁵ Military objectives, in turn, are defined in Protocol I Article 52(2):

Attacks shall be limited strictly to military objectives. In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.¹⁶⁶

The Commentary for this article indicates military objectives are also meant to encompass combatants.¹⁶⁷

Many of the obligations placed on states by the law of war flow from this principle of distinction. Combatants are obliged to carry weapons openly and wear uniforms so they may be distinguished from civilians.¹⁶⁸ Military facilities are to be

¹⁶⁴ Schmitt, *supra* note 149, at 148 (1999).

¹⁶⁵ Protocol I, *supra* note 77, at art. 48. Article 51(2) states, "The civilian population as such, as well as individual civilians, shall not be the object of attack," while Article 52(1) provides that, "Civilian objects shall not be the object of attack or of reprisals." *Id.*

¹⁶⁶ Protocol I, *supra* note 77, at Art. 52(2).

¹⁶⁷ PROTOCOL I COMMENTARY, *supra* note 103, at 635.

¹⁶⁸ See *supra* note 184.

placed apart from civilians and civilian objects.¹⁶⁹

While there is general agreement Protocol I accurately summarizes customary international law concerning the principle of distinction, there is disagreement over how this principle should be implemented on the field of battle.¹⁷⁰ There are at least two reasons for this problem: 1) the subjective nature of the test for determining what is a lawful military objective and 2) the increasing intermingling of military and civilian objects.

The subjective nature of applying the principle of distinction results from two aspects of the definition of a military objective: the determination of what makes an "effective contribution" to military action and what constitutes a "definite military advantage." In the midst of the stresses and strains of a conflict, different commanders are likely to reach different determinations about these matters, particularly as there are significant disagreements over issues as basic as whether economic facilities providing indirect but important support to the military may even be targeted.¹⁷¹

The principle of distinction can be difficult to apply when

¹⁶⁹ Several examples of this requirement are located within Protocol I, *supra* note 77. Article 58 requires states to remove civilians from the vicinity of military objects and to avoid placing military objects in densely populated areas. Article 53 prohibits using cultural objects or places of worship for military purposes.

¹⁷⁰ See Schmitt, *supra* note 149, at 148-49. See also Henckaerts, *supra* note 148, at 14 (discussing how this definition of military objective has been adopted in at least five other treaties).

¹⁷¹ See Schmitt, *supra* note 149, at 149.

civilian and military objects, including personnel, are intermingled.¹⁷² When objects such as airports, buildings, or telecommunications systems have dual military and civilian purposes, even the most precise weapons may cause harm to civilians. The principle of distinction does not provide civilians with absolute immunity from attack or clear guidance on how to deal with situations where the distinction between civilian and military has become blurred.¹⁷³ The laws of war have long acknowledged that injury to civilian objects incidental to attack on lawful military objectives may be legitimate if not excessive as determined through use of the third principle, that of proportionality.¹⁷⁴

The principle of proportionality must be used to determine how to proceed when directing attacks against military objectives that will likely cause harm to civilians and civilian

¹⁷² See Tom Boyle, *Proportionality in Decision Making and Combat Actions*, in PROTECTING CIVILIANS IN 21ST-CENTURY WARFARE 33 (Mireille Hector & Martine Jellema, eds., 2001). Boyle, a military officer and bomber pilot who handled targeting issues for the U.K. armed forces, provides details about the practical and procedural aspects of ensuring targeting decisions comply with the law of war. He notes how making the distinction between military and civil objects is becoming increasingly difficult, particularly when targeting communications infrastructure.

¹⁷³ See Schmitt, *supra* note 149, at 159-60 (discussing problems in the concept of what constitutes a military objective when civilian activities become militarized and military activities become civilianized) and DETTER, *supra* note 93, at 146 (discussing current state of confusion over who should be considered a combatant).

¹⁷⁴ See Judith Gail Gardam, *Proportionality and Force in International Law*, 87 AM. J. INT'L L. 391, 397-98 (summarizing history and current status of principle of proportionality).

objects. Proportionality calls for a balancing test to weigh military advantage against civilian harm. States have an obligation to use the means and methods of attack that will cause the least amount of collateral damage while still achieving the military objective.¹⁷⁵ This principle is codified by Protocol I in Article 51(5)(b), which prohibits, "an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated."¹⁷⁶

When performing this balancing test, collateral damage to civilians is allowed to the extent that it is not excessive in

¹⁷⁵ Schmitt, *supra* note 149, at 152.

¹⁷⁶ Protocol I, *supra* note 77, at art. 51(5)(b). Articles 35 and 57 of Protocol I also contain language relating to proportionality. Article 35(2) states, "It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering. Article 57(2)(b) states, "an attack shall be canceled or suspended if it becomes apparent that the objective is not a military one or is subject to special protection or that the attack may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated." On the issue of whether this article codifies customary international law, see Henckaerts, *supra* note 148 (noting how state practice establishes the rule in this article is customary international law).

relation to the "concrete and direct military advantage."¹⁷⁷ The determination of when civilian losses should be considered excessive is subjective in nature and has not been resolved.¹⁷⁸ Although the extent of protection offered civilians by this principle is uncertain, two types of attacks do appear to be inherently disproportionate: those that intentionally target civilians and attacks that have been so negligently prepared or conducted that they amount to targeting civilians directly.¹⁷⁹

These principles of military necessity, distinction, and proportionality work to protect civilians, but they are only principles. They provide general guidelines, not detailed regulations, for states to follow when planning attacks and selecting targets. These principles have not been clearly defined and proper implementation of them involves making subjective calculations about whether targets are military objectives, the value of attacking them, and the acceptable toll of civilian casualties from collateral damage.

IV. Civilian Involvement with the Armed Forces in Combat

The two types of civilians accompanying the armed forces,

¹⁷⁷ Disagreement exists over the meaning of "concrete and direct military advantage." Gardam, *supra* note 174, at 406, notes the language in Protocol I appears to require determining whether individual parts of an attacks are proportional. Henckaerts, *supra* note 148, at 17, indicates many states disagree with this interpretation and calculate proportionality based on the military advantage to be derived from the whole attack.

¹⁷⁸ Gardam, *supra* note 174, at 400.

¹⁷⁹ *Id.* at 410.

employees and contractors, have different relationships with the armed forces. The distinction between these relationships, at least in the United States, is that the armed forces, as an employer, may control the detailed physical performance of civilian employees but not contractors.¹⁸⁰ Civilian employees fall under the command of a military commander and are subject to supervision, control, and discipline by the commander or his subordinate.¹⁸¹ Contractors work for themselves or a private company. They are not subject to being controlled and supervised by a military commander to the same degree as civilian.¹⁸²

A. Armed Forces Utilization of Civilian Employees

Civilian employees are directly employed by armed forces throughout the world. In the United States, the Department of Defense employs almost 700,000 civilian employees.¹⁸³ These employees work in key areas such as weapons systems maintenance, logistics, and intelligence and form an integral part of the

¹⁸⁰ See *Logue, et al, v. United States*, 412 U.S. 521, 527-528 (1973).

¹⁸¹ See Lisa L. Turner & Lynn G. Norton, *Civilians at the Tip of the Spear*, 51 A.F. L. REV 1, 35-36 (2001).

¹⁸² See *id.* at 36-38.

¹⁸³ U.S. GEN. ACCOUNTING OFFICE, GAO-03-475, DOD PERSONNEL: DOD ACTIONS NEEDED TO STRENGTHEN CIVILIAN HUMAN CAPITAL STRATEGIC PLANNING AND INTEGRATION WITH MILITARY PERSONNEL AND SOURCING DECISIONS 1(2003), available at <http://www.gpoaccess.gov/gaoreports/index.html>.

Department of Defense.¹⁸⁴ While the majority of these employees work within the United States, many are stationed overseas or have deployed abroad in support of military operations.¹⁸⁵

Civilian employees are directly involved in supporting the operation of weapons systems throughout the U.S. military. The Department of Defense maintains an extensive network of industrial facilities to perform weapons systems maintenance, including Naval shipyards, Army depots and arsenals, and Air Force logistics centers.¹⁸⁶ These facilities employ tens of

¹⁸⁴ See *id.* (listing functions performed by civilian employees). See also Diane K. Morales, *DOD Maintenance Depots Prove Their Worth: The Global War on Terrorism has Allowed the Department of Defense's In-House Maintainers to Demonstrate Their Vital Role in Supporting Combat in Afghanistan and Iraq*, ARMY LOGISTICIAN, Mar. 1, 2004, at 3 (discussing the work performed by 60,000 workers at military depots).

¹⁸⁵ See *The Defense Transformation Act for the 21st Century Act: Hearing Before the Subcomm. on Civil Service and Agency Organization of the House Comm. on Gov't Reform*, 108th Cong. (2003) (statement of David S. C. Chu, Under Secretary of Defense for Personnel and Readiness) available at <http://reform.house.gov/CSA/Hearings/EventSingle.aspx?EventID=365>, [hereinafter *Chu Statement*] (indicating 1500 civilian employees have deployed to the Iraqi theater of operations). See also U.S. GEN. ACCOUNTING OFFICE, GAO/NSIAD -97-127BR, DEFENSE BUDGET: OBSERVATIONS ON INFRASTRUCTURE ACTIVITIES 29 (1997), available at <http://www.gpoaccess.gov/gaoreports/index.html> [hereinafter 1997 GAO REPORT] (discussing civilian deployments during First Gulf War) and *Deployment of Civilians Increasing*, FDCH FED. DEP'T AND AGENCY DOCUMENTS, Oct. 28, 1999, available at LEXIS, News Library, FEDDOC File (noting 43000 Army civilians deployed to overseas locations, including some who have provided direct support to military operations in areas such as Haiti, Bosnia, and Kosovo).

¹⁸⁶ See George Cahlink, *Erasing Bases; The Hit List Taking Shape Today may be the Biggest Ever*, GOV'T EXECUTIVE, Oct. 2003, at 29 (discussing size of DoD industrial facilities and noting they perform twenty billion dollars of work annually).

thousands of civilian employees who repair, maintain, manufacture, and upgrade weapons systems ranging from ships to missiles to aircraft.¹⁸⁷

Civilian employees also play an important role in the logistics of shipping personnel and materiel in support of military operations.¹⁸⁸ Civilians operate ports, load airplanes, drive trucks and sail ships to assist in transporting the massive amount of supplies combat operations require.¹⁸⁹

Civilian employees may deploy to areas where combat operations are occurring and they have deployed in the thousands to areas of conflict around the world.¹⁹⁰ The Department of Defense has determined that certain positions, designated as emergency essential (hereinafter E-E), must be subject to

¹⁸⁷ See *id.* and Morales, *supra* note 184.

¹⁸⁸ See John R. Moran, Letter to Editor, *Honoring Civilians*, WASH. POST, Jan. 8, 1992 (noting efforts of civilians employees during Operation Desert Storm operating 33 ports, loading 560 ships with almost one million pieces of equipment, and sending 37,000 containers to Persian Gulf), and Jack Dorsey, *Transporting People, Goods to War a Big Job, General Says*, VIRGINIAN PILOT, Mar. 8, 2003 (noting efforts of civilians assisting in shipment of men and materiel to Afghanistan and Iraq).

¹⁸⁹ See *USS Cole-Implications and Implementation of Lessons Learned: Hearing Before the Senate Armed Services Comm.*, 107th Cong. (2001) (statement of General Charles T. Robertson, Jr., USAF Commander in Chief of U.S. Transportation Command) available at <http://armed-services.senate.gov/hearings/2001/f010503.htm> (discussing broad range of transport activities); Katherine McIntire Peters, *Line in the Sand: Launching a Bold Military Sweep Through Iraq Required a Supply Line Stretching from Depots in the United States to Fast-moving Forces in the Desert*, May 2003, at 69; and Dorsey, *supra* note 188.

¹⁹⁰ See Chu Statement, *supra* note 185, and 1997 GAO REPORT, *supra* note 185, at 29.

deployment. An E-E position is one that is:

[R]equired to ensure the success of combat operations or to support combat-essential systems That position cannot be converted to a military position because it requires uninterrupted performance to provide immediate and continuing support for combat operations and/or support maintenance and repair of combat-essential systems.¹⁹¹

Although this definition indicates civilian employees only deploy when there is a military necessity for their presence, the recent trend in deployments has been for civilian contractors to displace civilian employees.¹⁹² Contractors have become favored for at least two reasons: the expertise they may provide and the difficulties commanders experience in managing civilian employees.¹⁹³

There are several reasons to expect that civilian employees

¹⁹¹ DEPARTMENT OF DEFENSE DIRECTIVE 1400.10, SUBJECT: EMERGENCY-ESSENTIAL (E-E) DOD U.S. CITIZEN CIVILIAN EMPLOYEES para. E2.1.5 (1992) (ellipsis added) (indicating in addition that only U.S. citizens may hold E-E positions). For Air Force and Army guidance on when and how to deploy civilian employees, see AIR FORCE INSTRUCTION 10-231, FEDERAL CIVILIAN DEPLOYMENT GUIDE (1999) and DEPARTMENT OF THE ARMY PAMPHLET 690-47, DA CIVILIAN EMPLOYEE GUIDE (1995).

¹⁹² *Transforming the Department of Defense Personnel System: Finding the Right Approach: Hearing Before the Senate Comm. on Governmental Reform, 108th Cong. (2003)* (testimony of Donald H. Rumsfeld, Secretary of Defense) [hereinafter *Transforming DoD Personnel System Hearing*], available at FDCH Political Transcripts, Jun. 4, 2003, LEXIS, News Library, POLTRN File (indicating because of perceived difficulties in managing employees 83% of civilians deployed to Central Command for Operation Iraqi Freedom were contractors while only 17% were civilian employees).

¹⁹³ See *id.* and the testimony of Dr. David Chu, Undersecretary of Defense for Personnel and Readiness at *id.*

may become more deployable. Changes in the civilian personnel system may eliminate some of the personnel rules that made military commanders reluctant to deploy civilians.¹⁹⁴ The Department of Defense has indicated a desire to shift up to 300,000 position currently occupied by military members to civilian employees.¹⁹⁵ Shifting military to civilian positions would result in a larger pool of employees offering additional skills and save the government billions of dollars as civilian employees are substantially less expensive to employ than military members.¹⁹⁶

B. Armed Forces Utilization of Civilian Contractors

Civilian contractors working for private military companies (hereinafter PMCs) are involved in almost every aspect of military activity. The United States makes significant use of contractors but is not unique in doing so. Countries throughout the world make use of these contractors and the dollar value of their services runs into the tens of billions annually.¹⁹⁷

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* See also Stephen Barr, *Pentagon Plan Would Shift 10,000 Military Jobs to Civilians*, WASH. POST., Oct. 7, 2003, at B2 (discussing Defense Department ready to convert 10,000 jobs performed by military members to civilian positions in fiscal year 2004 alone).

¹⁹⁶ See 1997 GAO REPORT, *supra* note 185, at 21 (stating manning a position with a civilian costs on average \$15,000 less than manning with a military member).

¹⁹⁷ Chalmers Johnson, *The War Business: Squeezing a Profit from the Wreckage in Iraq*, HARPER'S MAGAZINE, Nov. 1, 2003, at 53.

1. Range of Services

Civilian contractors can be hired to do perform almost any service a state requires. Contractors can train, feed, equip, and house an army. During a conflict, contractors can maintain weapons, gather intelligence, provide security at forward locations, and even fight.¹⁹⁸ Three categories of private military companies predominate: security provision firms, military consulting firms, and military support firms.¹⁹⁹ All three types of PMCs have the capability to provide services that may be considered direct participation in hostilities.

Provider firms offer contractors who can provide or direct the use of force, whether in the form of security, peacekeeping operations, controlling units engaged in combat, or engaging directly in combat.²⁰⁰ Because of the nature of their work, they are often armed and may wear some type of uniform.²⁰¹

States may hire provider firms directly or they may contract with companies that in turn subcontract to provider firms for security services. The situation in Iraq illustrates

¹⁹⁸ See SINGER, *supra* note 129, at 9-17.

¹⁹⁹ See *id.* at 92-97. See also *Comment & Analysis*, FIN. TIMES, August 12, 2003, at 15 and UK GREEN PAPER, *supra* note 136, at 8-9.

²⁰⁰ See SINGER, *supra* note 129, at 92-94.

²⁰¹ See DEPARTMENT OF THE ARMY PAMPHLET 715-16, CONTRACTOR DEPLOYMENT GUIDE para. 5-1, app. B-1 (1998) (authorizing issuance of uniforms to deploying contractors). See also Christian Bourge, *Can Private Firms Bring Peace?*, UPI, Aug. 26, 2003, available at LEXIS, News Library, UPI File (stating contractor bodyguards for head of U.S. civilian authority in Baghdad wear uniforms resembling those worn in Army).

how this may happen. The United States has contracted directly with provider firms for them to provide protection to the Coalition Provisional Authority.²⁰² The United States has also contracted with companies engaged in the reconstruction effort and these companies have, in turn, subcontracted protection services out to provider firms.²⁰³

Security contractors have become an integral part of the occupation and reconstruction of Iraq. An estimated 20,000 security contractors were in Iraq as of April 2004 and this number is estimated to increase to 30,000 by June 2004.²⁰⁴ Although these contractors work for many different companies, they do communicate with and assist one another and amount, in many ways, to the largest private army in the world.²⁰⁵ They provide protection for the Coalition Provisional Authority, military facilities and convoys, government ministries, oil

²⁰² See Seth Borenstein & Scott Dodd, *Private Security Companies in Iraq See Big Paychecks, Big Risks*, KNIGHT RIDDER/TRIB. NEWS SERVICE, Apr. 2, 2004, available at LEXIS, News Library, KRTNWS File (discussing contracts Coalition Provisional Authority in Iraq has made with private security companies).

²⁰³ *Id.* See also T. Christian Miller, *Soaring Security Costs Burden Iraq Reconstruction Efforts; For Contractors in a High-Risk Zone, Cash and Manpower are Being Diverted from Projects*, L.A. TIMES, Apr. 9, 2004, at A10 (noting as much as four billion dollars may be spent on security as some companies involved in reconstruction efforts spending 20% of contract price for protection).

²⁰⁴ Dana Priest & Mary Pat Flaherty, *Under Fire, Security Firms Form an Alliance*, WASH. POST, Apr. 8, 2004, at A1.

²⁰⁵ *Id.*

facilities, and other contractors.²⁰⁶ Security contractors have engaged in combat and killed and been killed.²⁰⁷

While the scale of contractor involvement in Iraq is unparalleled, contractors have been providing security forces for protection throughout the world.²⁰⁸ On occasion, security contractors have been hired for the explicit purpose of engaging in combat operations.²⁰⁹ Countries where PMCs have engaged in combat directly include Sierra Leone, Angola, and Ethiopia.²¹⁰ PMCs in these, and other countries, have used helicopters, fighter and bomber aircraft, armored vehicles and other

²⁰⁶ See Bourge, *supra* note 201 (contractors providing security to CPA); Borzou Daragahi, *Contractors Lighten Load on Troops; For Profit, Private Firms Train Iraqi Soldiers, Provide Security and Much More*, PITTSBURGH POST-GAZETTE, Sep. 28, 2003, at A6 (discussing role of contractors in guarding the Baghdad airport and oil fields); and Oliver Poole, *On Patrol with Baghdad's Hired Guns*, DAILY TELEGRAPH (London), May 4, 2004, at 12 (discussing contractors providing protection for convoys of military equipment).

²⁰⁷ Miller, *supra* note 203 (indicating 50 security contractors are estimated to have been killed as of April 2004). See also Poole, *supra* note 206 (providing examples of casualties inflicted by security contractors).

²⁰⁸ SINGER, *supra* note 129, at 9-15, 93 (providing overview of private security contractor operations in Africa, Europe, Asia and the Americas). See also 'Who Takes Responsibility if One of These Guys Shoots the Wrong People?' *The Hiring of Contractors for Military Tasks Extends to Their Use in Peacekeeping Operations*, FIN. TIMES, Aug. 12, 2003, at 15 (discussing contractors guarding US Embassy in Liberia fighting rebels besieging embassy).

²⁰⁹ SINGER, *supra* note 129, at 92-94.

²¹⁰ *Id.* at 107-110 (discussing Angola), at 110-115 (discussing Sierra Leone), and 158 (discussing Ethiopia). See also International Consortium of Investigative Journalists, *Marketing the New Dogs of War*, Oct. 30, 2002, available at <http://www.publicintegrity.org/bow/> (discussing details of private military firm operations in Africa).

sophisticated weapons along with trained soldiers to carry out their contract with their hiring state.²¹¹

The second category of PMCs, consulting firms, offer advice and training.²¹² They differ from security provision firms in that they do not, typically, participate in battlefield operations.²¹³ The nature of this advice and training covers the spectrum from explaining how to operate sophisticated equipment or conduct large and small scale combat operations to advising how a state's armed forces should be organized.²¹⁴ Consulting contractors may train one unit or an entire army and, in fact, contractors are providing training for the Iraqi and Afghani armies as well as the Saudi Arabian National Guard.²¹⁵ Training and advice is not limited to teaching soldiers how to fight, but also addresses how they should be used in active military operations. Consulting contractors are often hired to provide

²¹¹ SINGER, *supra* note 129, at 4 and 113 (discussing Sierra Leone and how PMC contractors killed several hundred people in one operation), at 108-9 (discussing Angola), and at 173 (discussing Ethiopia).

²¹² *Id.* at 95. See also UK GREEN PAPER, *supra* note 136, at 8.

²¹³ SINGER, *supra* note 129, at 95.

²¹⁴ See *id.* at 95-97 and UK GREEN PAPER, *supra* note 136, at 8. See also U.S. GEN. ACCOUNTING OFFICE, GAO-03-695, MILITARY OPERATIONS: CONTRACTORS PROVIDE VITAL SERVICES TO DEPLOYED FORCES BUT ARE NOT ADEQUATELY ADDRESSED IN DOD PLANS 7, 10 (2003) [hereinafter 2003 GAO REPORT ON MILITARY OPERATIONS], available at <http://www.gpoaccess.gov/gaoreports/index.html> (noting role of contractors in training soldiers how to use equipment that is either specialized or utilizes newer technologies).

²¹⁵ See Johnson, *supra* note 197. Contractors training the Saudi National Guard were one of the main targets when Al Qaeda terrorists attacked a housing compound in Riyadh in May 2002, killing thirty-four people, eight of them Americans. *Id.*

advice on how to conduct actual military operations.²¹⁶

Contractors from consultant PMCs can become closely involved in combat operations in at least two ways: contractors may accompany the units they train or advise into combat and contractors may become actively involved in planning combat operations. Even though the mission of consulting contractors is to train or advise, they may be expected to remain with their units when they take to the field.²¹⁷ This event happened during the first Gulf War when contractors from Vinnell Corporation who were teaching the Saudi National Guard how to use heavy weapons systems accompanied the Guard into battle against Iraqi forces in the battle of Khafji.²¹⁸ An example of consulting contractors planning military operations allegedly occurred in the Balkans, where contractors with MPRI reportedly helped prepare Croatia's plans for a successful offensive in 1995 against the Serbs in Krajina.²¹⁹

The third category of PMC, support firms, provide a vast array of services such as logistics, intelligence, and technical

²¹⁶ See SINGER, *supra* note 129, at 95-97.

²¹⁷ See *id.* at 95 (quoting a contractor who stated, "If we do operate in civil wars, we are there as 'advisers' or 'trainers.' But, of course we are on the frontline, and the excuse is so that we can see if our training is working.")

²¹⁸ Esther Schrader, *Companies Capitalize on War on Terror*, L.A. TIMES, Apr. 14, 2002, at A1.

²¹⁹ See SINGER, *supra* note 129, at 125-127 (discussing how MPRI's CEO, a former Army four star general, met with the Croat general planning the offensive at least ten times in the five days before the offensive began). See also Eric Pape et al., *Dogs of Peace*, NEWSWEEK, Aug. 25, 2003, at 22. Both SINGER and Pape note MPRI has denied the allegations. *Id.*

support and maintenance of military equipment and systems.²²⁰

Many support firms are large companies capable of handling extremely challenging support needs during the midst of a large scale conflict. The United States Army has awarded a multi-billion dollar contract to a major PMC, Kellogg Brown & Root, to provide for the logistical and maintenance needs of the Army in Iraq for two years.²²¹ Altogether, twenty to thirty percent of the essential military support services in Iraq are provided by contractors.²²²

These support activities include building and operating military bases as well as bringing in fuel, food, and other needed material. While perhaps more extensive than before, this type of activity is the same type contractors have traditionally provided the armed forces.²²³ Providing logistical assistance to the armed forces is not without risk, however, as contractors

²²⁰ SINGER, *supra* note 129, at 97.

²²¹ See Johnson, *supra* note 197 (noting potential value of contract seven billions dollars and that Kellogg Brown & Root has provided similar services in Kuwait, Turkey, Uzbekistan, and the Balkans).

²²² Anthony Bianco et al., *Outsourcing War*, BUS. WK., Sep. 15, 2003, at 68.

²²³ See Geneva Convention III, *supra* note 86, at art. 4 (referring to supply contractors). See also *Military Contractors: an Old Story*, U.S.NEWS & WORLD REP., Nov. 4, 2002, at 41, for figures on the number of civilians who have accompanied U.S. forces in past conflicts, including 200,000 in the Civil War and 734,000 in World War II.

may be placed in dangerously close proximity to combat.²²⁴

A major source of business for contractors is maintaining sophisticated military systems. Some of the equipment militaries use is so complicated that militaries rely on contractors to maintain it even during a conflict.²²⁵ Examples of weapons in the United States inventory dependent on contractor maintenance include the F-117 Stealth fighter, the M1A1 tank, the Patriot missile, the B-2 stealth bomber, Apache helicopters, and many naval surface warfare ships.²²⁶ For some systems, there may not even be military members capable of providing maintenance.²²⁷ The result of this dependence on contractor support is that contractors will need to go where their services are needed, even if that brings them in close proximity to the battlefield.²²⁸

²²⁴ See *What is KBR?*, DALLAS MORNING NEWS, May 10, 2004, at 2A (stating 34 KBR employees have died in Iraq and 74 have been wounded) and Eric Pape et al., *supra* note 219 (relating how contractors flying transport helicopters in Liberia and Sierra Leone in support of Nigerian peacekeepers were fired upon and returned fire).

²²⁵ Bianco et al., *supra* note 222.

²²⁶ See *id.* and Singer, *supra* note 139, at 522. See also 2003 GAO REPORT ON MILITARY OPERATIONS, *supra* note 214, at 8-9 (discussing Apache helicopters and Predator UAVs).

²²⁷ See 2003 GAO REPORT ON MILITARY OPERATIONS, *supra* note 214, at 8-9 and 16 (discussing reliance on contractors to provide maintenance for various systems must be used because the armed forces simply lack any internal capacity to maintain the equipment).

²²⁸ See Thomas Adams, *The New Mercenaries and the Privatization of Conflict*, PARAMETERS, Summer 1999, at 103, 115, available at <http://www.carlisle.army.mil/usawc/parameters/99summer/adams.htm> ("Even the US Army has concluded that in the future it will require contract personnel, even in the close fight area, to keep its most modern systems functioning.").

Contractors even operate some military systems. Contractors flew on targeting and surveillance aircraft and operated Global Hawk and Predator UAVs in Afghanistan and Iraq.²²⁹ This type of participation does not appear anomalous as new systems, such as a Marine truck and an Army surveillance aircraft are designed to be operated by contractors.²³⁰

Support contractors have also become active in providing services in information related fields including military intelligence and information warfare.²³¹ Intelligence may come in the form of interrogating prisoners and detainees, performing analysis, maintaining and supporting intelligence computer and electronic systems, or providing intelligence in the form of

²²⁹ See Peter W. Singer, *Warriors for Hire in Iraq*, SALON.COM, Apr. 15, 2004, available at <http://www.brookings.edu/views/articles/fellows/singer20040415.htm>. and Victoria Burnett et al, *From Building Camps to Gathering Intelligence, Dozens of Tasks Once in the Hands of Soldiers Are Now Carried Out by Contractors*, FIN. TIMES, Aug. 11, 2003, at 13 (discussing contractors operating UAVs used in Iraq and Afghanistan).

²³⁰ See Victoria Burnett et al, *supra* note 229, at 13.

²³¹ See 2003 GAO REPORT ON MILITARY OPERATIONS, *supra* note 214, at 2-10, 17 (discussing contractor-provided intelligence services); Linda Robinson & Douglas Pasternak, *A Swarm of Private Contractors Bedevils the U.S. Military*, U.S. NEWS & WORLD REPORT, Nov. 4, 2002, at 38 (noting prevalence of contractors, and lack of control over them, in U.S. military intelligence in Balkans); UK GREEN PAPER, *supra* note 136, at 29-38 (charting various operations around the world where contractors have provided intelligence services); and Adams, *supra* note 228, at 115 (discussing information warfare). For an indication of how related intelligence and information warfare can be to one another, see Anthony Lisuzzo, *Data Sharing on the Battlefield*, GOV'T COMPUTER NEWS, Jun. 16, 2003, available at LEXIS, News Library, GOVCMP File (discussing how the Army has fused intelligence and information warfare together into the Intelligence and Information Warfare Directorate).

aerial reconnaissance and satellite imagery.²³² PMCs have become involved in information warfare, including the provision of defensive and offensive operations that would include CNAE.²³³

No matter what type of assistance accompanying contractors provide, they may run the risk of crossing the line into taking part in hostilities. Even contractors providing support services may find themselves in danger of becoming unlawful combatants, whether because their activities take them into proximity with the battlefield or because their support is of such a nature as to become closely tied to use of a weapons system.

2. Reasons for Use

The United States is the largest consumer of PMC services, but they are widely used around the world.²³⁴ States engage the services of PMCs for a variety of reasons. Contractors may be hired because: 1) of their expertise, 2) they can provide a needed service more cheaply or efficiently than the military can accomplish with its internal resources, 3) their use is

²³² See SINGER, *supra* note 129, at 99.

²³³ Id. at 62-63 and 100. See also Dawn S. Onley, *Air Force Picks Information Warfare Contractors*, GOV'T COMPUTER NEWS, Aug. 28, 2003, available at LEXIS, News Library, GOVCMP File (discussing pending 252 million dollar Air Force contract for information warfare techniques).

²³⁴ See Bianco et al, *supra* note 222.

politically expedient, or 4) of military restructuring.²³⁵

Contractors can provide expertise in skills not found within a state's armed forces. States may want use of contractors' skills for a limited period of time or the transfer of those skills to their own armed forces. PMCs provide a mechanism through which skills developed at significant cost in sophisticated militaries such as those possessed by the United States, the United Kingdom or South Africa can be transferred relatively cheaply to states with inefficient or poorly trained militaries.²³⁶ Contractors can also provide expertise in areas where militaries do not have the requisite competence.²³⁷

A second reason states use PMCs is to allow them more control over the number of uniformed military personnel. After the Cold War, many states made substantial cuts in the size of their militaries.²³⁸ The United States military alone shrank by one third.²³⁹ At the same time, however, the United States has faced an increasing number of deployment commitments.²⁴⁰ Using

²³⁵ See *id.*; SINGER, *supra* note 129, at 49-70; and UK GREEN PAPER, *supra* note 136, at 12-14.

²³⁶ See SINGER, *supra* note 129, at 96 ("The primary advantage of using outside consultants is access to and delegation of a greater amount of experience and expertise than almost any standing public military force in the world can match."); Robinson & Pasternak, *supra* note 231, at 38 (discussing former Soviet bloc countries using consultants to make their militaries reach NATO standard). Even a modern military such as the U.K.'s is heavily reliant on training from contractors. See UK GREEN PAPER, *supra* note 136, at 13.

²³⁷ See *supra* notes 226-27 and accompanying text.

²³⁸ SINGER, *supra* note 129, at 53.

²³⁹ *Id.*

²⁴⁰ *Id.*

contractors allows states to engage in extensive military activity with a smaller uniformed force.²⁴¹ States may benefit from using contractors because they can be substantially cheaper to use than military members.²⁴² In addition, some states simply believe that many military functions can be performed better if outsourced to the private sector.²⁴³

Finally, states can use PMC contractors to reduce the political costs of military operations and to avoid domestic or international constraints on the use of their own armed forces. The use of contractors can reduce political costs because the public tends to be more concerned with military members deploying and facing harm than contractors.²⁴⁴ This lowered concern can be seen reflected in the reduced attention paid to contractor casualties versus those suffered by the military.²⁴⁵

²⁴¹ See *Dangerous Work; Private Security Firms in Iraq*, ECONOMIST, Apr. 10, 2004, available at LEXIS, News Library, ECON File.

²⁴² See 'Who Takes Responsibility if One of These Guys Shoots the Wrong People, *supra* note 208, at 15 (discussing PMC position it could perform a military operation at one-fifteenth of what it would cost the U.S. military); and Bianco et al., *supra* note 222, at 68 (discussing cost savings accruing to PMCs because they do not bear the cost of training and deploying soldiers and may be able to subcontract with local labor for significant cost savings).

²⁴³ See SINGER, *supra* note 129, at 66-70.

²⁴⁴ *Id.* at 58. See also Ed Timms, *In Iraq, Advances and Setbacks: Private Firms Pick up the Slack in Conflict, but at What Price?*, DALLAS MORNING NEWS, Apr. 13, 2004, at 1A.

²⁴⁵ Even though estimates of contractor casualties in Iraq since the beginning of the war in 2003 range from several dozen to as high as one hundred, many companies do not release casualty figures, nor has the U.S. government. See Miller, *supra* note 203, at A10. See also SINGER, *supra* note 129, at 208 (noting lack of outcry over contractor deaths in Colombia).

States use contractors to avoid legal and policy constraints on the use of armed forces. Congress may impose limitations on the numbers of troops who may deploy to a location or the activities they may engage in. Congress imposed such limitations in Colombia and the Balkans and contractors were used in each case to circumvent them.²⁴⁶ The United Kingdom allowed a PMC to ship arms to Sierra Leone in circumvention of a United Nations arms embargo.²⁴⁷

C. Legal Status of Current Civilian Employee and Contractor Activities

Civilian employees and contractors share the same status under the law of war as civilians accompanying the armed forces.²⁴⁸ Because of their civilian status, they are not authorized to take direct part in hostilities. The treaties containing this prohibition were ambiguous about its scope. The practice of states indicates this prohibition against engaging in combat is being read very narrowly so as to widen the scope for civilian participation in military activities. Even with this narrow interpretation, the prohibition against civilians participating in combat rule has been violated numerous times.²⁴⁹

²⁴⁶ See 2003 GAO REPORT ON MILITARY OPERATIONS, *supra* note 214, at 8 (discussing the Balkans) and SINGER, *supra* note 129, at 206-7 (discussing Colombia).

²⁴⁷ Bourge, *supra* note 201.

²⁴⁸ See Geneva Convention III, *supra* note 86, at art. 4(A)(4).

²⁴⁹ See *supra* notes 209-11 and accompanying text.

Faced with this ambiguously narrow rule, states are employing civilians in an assortment of activities that may not involve civilians directly using weapons for combat but strain the distinction between combat and noncombat activities. Armed civilians provide security, civilians maintain weapons systems in combat areas, and operate intelligence-gathering systems.²⁵⁰

While engaging civilians to conduct offensive combat operations appears to be frowned upon, states openly employ civilians for all other military activities, even where the legal status of such participation is unclear. This uncertainty over when civilians become combatants has been widely acknowledged.²⁵¹ A publication of the U.S. Army discussing deployment of civilians notes:

Civilians who take part in hostilities may be regarded as combatants and are subject to attack and/or injury incidental to an attack on a military objectives. Taking part in hostilities has not been clearly defined in the law of war, but generally is not regarded as limited to civilians who engage in actual fighting. Since civilians augment the Army in areas in which technical expertise is not available or is in short supply, they, in effect, become substitutes for military personnel who would be combatants.²⁵²

The U.S. military has even authorized the issuance of weapons to

²⁵⁰ See *supra* notes 200-231 and accompanying text.

²⁵¹ See *supra* notes 149-151 and accompanying text. See also INT'L COMM. OF THE RED CROSS, INTERNATIONAL HUMANITARIAN LAW AND THE CHALLENGES OF CONTEMPORARY ARMED CONFLICTS, 36 (2003) available at <http://www.icrc.org/Web/eng/siteeng0.nsf/iwpList74/73BA3908D5B7E2F7C1256E6D0034B5CE> (noting need for clarification about what constitutes direct participation in hostilities). See also David Barstow et al., *Security Companies: Shadow Soldiers in Iraq*, N.Y. TIMES, Apr. 19, 2004, at A1 (discussing how Iraqi insurgents are targeting contractors and how contractor duties are blurring with those of soldiers).

²⁵² DA CIVILIAN EMPLOYEE GUIDE, *supra* note 191, at para. 1-22.

civilian contractors and employees because they may be regarded as combatants by an enemy.²⁵³

This review of state practice indicates that the ambiguity over what constitutes direct participation in hostilities has not been resolved. Civilians are being integrated more deeply into states' armed forces and many of them are engaging in activities that could well be considered combat.

V. Civilian Participation in Remotely Conducted Combat Operations under the Law of War

Just as with traditional military operations, the legality of civilian involvement in remotely conducted combat operations depends on whether it constitutes direct participation in hostilities.²⁵⁴ Accompanying civilians who directly participate in remotely conducted combat operations resulting in damage to enemy personnel or equipment are unlawful combatants.²⁵⁵

Accompanying civilians participating in remotely conducted combat operations involving unmanned vehicles performing missions that may not be considered direct participation in hostilities, such as gathering intelligence or providing logistical support, have a questionable status as civilians.

²⁵³ See JOINT CHIEFS OF STAFF, JOINT PUBLICATION 1-0, DOCTRINE FOR PERSONNEL SUPPORT FOR JOINT OPERATIONS at O-2, para.(f) (1998). See also Turner & Norton, *supra* note 181, at 20.

²⁵⁴ Protocol I, *supra* note 77, at art. 43(1) and 51(3). See also *supra* notes 142-144 and accompanying text.

²⁵⁵ See *supra* notes 146-147 and accompanying text.

The potential for accompanying civilians to participate in these activities with an unsettled status will grow as increasing numbers of unmanned vehicles begin to arrive on the battlefield.²⁵⁶ Just as the truck driver taking ammunition to a front line unit may be considered an unlawful combatant, the civilian operator of a remote controlled truck performing the same mission may be deemed a combatant as well. Whether the civilian's distance from the battlefield prevents him from being considered an unlawful combatant cannot be decisively determined.

The law of war provides limited guidance to help determine when computer network attack and exploitation actions are considered combat.²⁵⁷ No treaties specifically regulate CNAE, although its use is governed by the law of war.²⁵⁸ Those aspects of CNAE which cause physical damage can be treated like other weapons, with the consequence that carrying out such attacks is limited to combatants.²⁵⁹ Other types of CNAE, particularly those involving attacks on networks to steal, destroy, or alter information within them, do not necessarily constitute direct

²⁵⁶ See *supra* notes 45-66 and accompanying text.

²⁵⁷ See Michael N. Schmitt, *Wired Warfare: Computer Network Attack and Jus in Bello*, 84 INT'L REV. OF THE RED CROSS 365, 368 (2002) (noting the absence of any humanitarian law instruments discussing CNA). See also DETTER, *supra* note 93, at 273 (noting lack of any systematic approach to regulating information warfare).

²⁵⁸ See *id.* at 369-71 (arguing CNA is regulated by international humanitarian law).

²⁵⁹ Schmitt, *id.* at 374-75, argues for a consequence-based approach under which CNA causing injury, death, damage, or destruction is covered by international humanitarian law.

participation in hostilities and are arguably open to lawful civilian participation.²⁶⁰

VI. Inadequacies in the Law of War Concerning the Regulation of Accompanying Civilians Participating in Combat Operations

The law of war inadequately regulates civilian participation in combat operations for four reasons: 1) direct participation in hostilities is defined too ambiguously to establish a clear demarcation between civilians and combatants, 2) lack of clarity over what activities are within the exclusive province of combatants undermines the principle of distinction by promoting the civilianization of military forces, 3) failure to differentiate between civilian employees and contractors promotes increased use of contractors, and 4) the complete ban on civilians directly participating in remotely conducted hostilities can be easily circumvented and may decrease adherence to the law of war.

A. The Law of War Fails to Adequately Separate Combatants From Civilians

The concept of what constitutes direct participation in hostilities is so ambiguous and inherently defective many accompanying civilians run the risk of being considered unlawful

²⁶⁰ See *id.* at 374.

combatants as the distinction between combatant and civilian status blurs.²⁶¹ The consequences of this blurring include the undermining of the protection of the general civilian population by making the application of the principle of distinction more difficult, and preventing many accompanying civilians from determining whether they have become unlawful combatants with the attendant exposure to criminal liability and lawful direct attack.

The uncertainty over what constitutes direct participation in hostilities undermines the principle of distinction, which is built upon the premise of being able to distinguish and separate civilian and military personnel and objects from each other.²⁶² Civilians are performing many tasks now which may be considered direct participation in combat.²⁶³ When civilians appear to be engaging in combat activity, particularly if they are not wearing any type of uniform or distinguishing emblem, then the protective power of the principle of distinction is weakened because civilians who have become unlawful combatants may be difficult to distinguish from the rest of the civilian population.

Accompanying civilians are inadequately protected by the current standard for determining unlawful combatant status because they cannot readily determine their criminal liability and status as lawful targets. Accompanying civilians are

²⁶¹ See DETTER, *supra* note 93, at 146. See also *supra* note 149 and accompanying text.

²⁶² See *supra* notes 164-172 and accompanying text.

²⁶³ See *supra* notes 204-211 and accompanying text.

entitled both to protection from being made the target of intentional attack by virtue of their civilian status and to immunity from criminal liability for their lawful acts as combatants because of their POW status if captured.²⁶⁴

Accompanying civilians performing the wide range of duties that may or may not constitute direct participation in hostilities thus face the situation where they may be deemed unlawful combatants by an enemy state, which may target them for attack and hold them criminally liable for their actions. Even accompanying civilians engaging in remotely conducted combat operations who do not face a serious risk of being targeted or captured during a conflict will still be affected. Because the prospect of criminal liability may continue for years after the conflict ends, accompanying civilians may fear leaving their employing state lest they face the risk of criminal prosecution when abroad.²⁶⁵

States employing accompanying civilians as unlawful combatants are in breach of their obligations under international law. Such breaches of the law can have a number of ramifications, ranging from alienation of public opinion to sanctions to legal action before tribunals such as the

²⁶⁴ Geneva Convention III, *supra* note 86, at art. 4(4), and Protocol I, *supra* note 77, at arts. 50(1) and 51(2). See also *supra* note 125 and 165 and accompanying text.

²⁶⁵ An Assessment of International Legal Issues in Information Operations, Dep't of Def. Off. Legal Counsel 46-47 (May 1999), available at downloads.securityfocus.com/library/infowar/reports/dodio.pdf.

International Court of Justice.²⁶⁶ Individuals responsible for making civilians serve as combatants or targeting accompanying civilians may also face criminal liability before national courts or the International Criminal Court.²⁶⁷

The current definition of direct participation in hostilities contains an inherent flaw on two accounts: it fails to encompass changes in warfare since the standard was formulated over one hundred years ago and it fails to come to a logical accommodation with the concept of military necessity. With respect to the failure to adjust to changes in warfare, the current standard depends on trying to define and limit direct participation in combat to the ultimate acts causing death or destruction, such as a soldier firing a rifle or a pilot firing a missile. The standard ignores the penultimate and other anterior acts of indispensable support provided to the soldier or pilot. These combatants occupy the top of a pyramid, supported by the broad-based efforts of support personnel, who are often accompanying civilians acting as intelligence analysts, logisticians, and weapons systems maintainers. Their efforts are essential in allowing combatants to inflict damage to the enemy.

Because the law of war prevents intentional targeting of accompanying civilians as long as they retain their civilian status, no matter how militarily important their work is, considerable tension has built up between the targeting

²⁶⁶ See DETTER, *supra* note 93, at 415-419.

²⁶⁷ *Id.* at 423-27.

standards employed for making direct and indirect attacks against civilians. The standard for making direct attacks against civilians is that they must be participating directly in hostilities, at which point they become unlawful combatants and may be targeted directly.²⁶⁸ This is a narrowly drawn standard, particularly when compared with the second standard, which provides that attacks against military objectives that will cause collateral injury to civilians are allowed if the civilian casualties will be proportionate to the concrete and direct military advantage anticipated.²⁶⁹

Accompanying civilians will almost always be covered by the latter standard because while the general civilian population must be segregated from military objectives, accompanying civilians work in them.²⁷⁰ Accompanying civilians working at a maintenance depot repairing aircraft illustrate this point. They are unlikely to be considered unlawful combatants because of their work on the aircraft, so they cannot be directly targeted because of their civilian status.²⁷¹ Yet their status as civilians offers them scant protection because the depot is unquestionably a legitimate military objective that may be

²⁶⁸ See *supra* notes 142 and 164-166 and accompanying text.

²⁶⁹ See Protocol I, *supra* note 77, at art. 51(5)(b) and *supra*, notes 174-179, and accompanying text.

²⁷⁰ See *id.* at art. 58 and *supra* notes 184-191 and 203-232 and accompanying text.

²⁷¹ Even if they could be directly targeted, the most logical place to attack them would be at the depot, where they would be concentrated together.

attacked.²⁷² Any protection provided to them by the law of war depends on the enemy's subjective conception of the advantage to be derived from attacking the depot and what constitutes a proportional amount of collateral damage. The presence of large numbers of workers does not necessarily shift the balance toward reducing the scope of an attack either, because more workers may only mean the depot has greater military significance-- so more civilian casualties will be acceptable in an attack.²⁷³

B. The Narrow Definition of What Constitutes Direct Participation in Hostilities Promotes the Civilianization of Military Forces

A fundamental concern of the law of war is protecting civilians.²⁷⁴ Consistent with this aim, civilians cannot be targeted for attack unless they forfeit their civilian status by participating directly in hostilities. The presumption exists that even a person whose conduct makes his claim to civilian status ambiguous should still be considered a civilian.²⁷⁵ A narrow, albeit ambiguous, definition of what constitutes direct

²⁷² GREEN, *supra* note 79, at 49 and footnote 186, indicates the paucity of protection accorded civilians at a military objective in this example: "There can be little doubt that a munitions factory as well as the barracks within its compound in which the workers reside is a military objective. It is questionable, however, whether their houses outside the factory would also qualify, even in the absence of any barracks."

²⁷³ See *supra* notes 174-179 and accompanying text.

²⁷⁴ See *supra* note 159 and accompanying text.

²⁷⁵ Protocol I, *supra* note 77, at art. 50(1).

participation in hostilities sufficient to turn a civilian into a combatant appears consistent with this aim. By construing who is a combatant narrowly, civilians supporting the war effort by working in armaments factories, chemical plants, or other installations vital to a state's capability to wage a conflict successfully retain their status as civilians and may not be targeted, though they may suffer injury when their workplace is attacked.

The current definition of direct participation in hostilities, however, has the opposite of its intended effect because it allows the civilianization of a state's military force. Because civilians are only prohibited from direct participation in combat, the allowable scope of civilian participation in military operations is inversely proportional to how narrowly combat is defined. If direct participation in hostilities is defined broadly, then all the activities within its scope become forbidden to accompanying civilians. Conversely, if direct participation is defined narrowly, then the range of positions that may be filled by civilians increases.

States have a strong interest in defining direct participation in hostilities narrowly so as to increase their flexibility in determining the exact mix of military personnel, civilian employees, and contractors they want in their forces.²⁷⁶ State practice reinforces this notion because accompanying

²⁷⁶ See *supra* note 249 and accompanying text.

civilians are increasingly performing duties once reserved for military personnel and becoming increasingly intertwined with, and essential for, combat operations.²⁷⁷

The law of war further encourages this civilianization by prohibiting civilians from being targeted for direct attack, whereas combatants are legitimate targets in and of themselves. While this protection has limits because civilians working in proximity to military objectives may suffer from collateral damage, the presence of accompanying civilians at a military objective may serve to shield a site by preventing or reducing the scope of an attack.

This increasing civilianization of military forces poses a threat to the general civilian population by weakening the principle of distinction between combatant and civilian. When accompanying civilians become deeply involved in military operations, an enemy may feel no choice but to target them specifically, which places other civilians at risk as they may be mistaken for accompanying civilians.²⁷⁸ This situation may have developed in Iraq, where all contractors find themselves in danger as the distinction between accompanying contractors and combatants has all but disappeared. The demise of distinction in Iraq was aptly captured by a Coalition Provisional Authority official who stated that in Iraq's reconstruction, "the military

²⁷⁷ See *supra* notes 195-196 and 198-199 and accompanying text.

²⁷⁸ See DETTER, *supra* note 93, at 144-146.

role and the civilian- contractor role are exactly the same."²⁷⁹

C. The Law of War Does Not Distinguish Between Civilian Employee and Contractor Participation In Combat Operations

The law of war treats civilian employees and contractors identically. States may choose to favor contractors over employees when staffing positions without legal impediment.²⁸⁰ Treating these two groups the same, however, undermines the obligation belligerents have to ensure their forces obey the law of war during the course of hostilities. This undermining occurs because civilian contractors are under substantially less control than civilian employees, meaning their opportunities to engage in misconduct are correspondingly greater.

Because employees and contractors are engaging in activities that reasonably could be construed as constituting direct participation in combat, the disciplinary requirements established for lawful combatant status in Geneva Convention III and Protocol I should be met.²⁸¹ Lawful combatants must be subject to an internal disciplinary system sufficient to ensure compliance with the law of war.²⁸² To meet these criteria states

²⁷⁹ Ariana Eunjung Cha & Renae Merle, *Line Increasingly Blurred Between Soldiers and Civilian Contractors*, WASH. POST, May 13, 2004, at A1.

²⁸⁰ See *supra* notes 248 and accompanying text.

²⁸¹ See Geneva Convention III, *supra* note 86, at art. 4(a) and (b), and Protocol I, *supra* note 77, at art. 43(1).

²⁸² Protocol I, *supra* note 77, at art. 43(1).

must be able to punish grave breaches of international law through criminal sanctions, although lesser infractions may be handled through non-penal disciplinary measures.²⁸³

States can more readily supervise, control, and discipline civilian employees than contractors. Within the U.S. military, civilian employees are considered to be under the control of a military commander, while civilian contractors are not.²⁸⁴ Civilian employees are also subject to a comprehensive supervisory and disciplinary scheme that allows a commander many options to prevent and punish misconduct.²⁸⁵

These options are not available with respect to civilian contractors because they do not have an employment relationship with the armed forces but with a private company. Because this relationship is contractual, control over contractor behavior is greatly attenuated.²⁸⁶ The armed forces may not even be aware of how many contractors are present within an area of operations or what jobs they are doing, as has been the recent U.S. experience.²⁸⁷ If the contractors misbehave, then the armed forces may have limited, if any, options for dealing with the

²⁸³ See Rudiger Wolfrum, *Enforcement of International Humanitarian Law*, in THE HANDBOOK OF HUMANITARIAN LAW IN ARMED CONFLICTS 530-42 (Dieter Fleck ed., 1995) (outlining some of the requirements of the disciplinary system).

²⁸⁴ See Turner & Norton, *supra* note 181, at 35.

²⁸⁵ *Id.* at 35-36.

²⁸⁶ *Id.* at 36-37.

²⁸⁷ See 2003 GAO REPORT ON MILITARY OPERATIONS, *supra* note 214, at 33.

misconduct.²⁸⁸ By ignoring the limited supervisory control armed forces exert over the contractors they hire, the probability of conduct inconsistent with the law of war being committed increases.²⁸⁹

D. The Prohibition Against Civilian Participation in Remotely Conducted Combat Operations is Subject to Circumvention

The nature of how remotely conducted combat actions are conducted makes circumvention of the prohibition against civilians engaging in combat easy to achieve. Combatants engaging in remotely conducted combat do so with their identities concealed from the opponent because they do not have direct contact with an enemy's forces. This secrecy does not excuse intentional violations of the law of war, but it does give states more of an opportunity to interpret the ban on direct participation narrowly to increase the scope of civilian participation because states know their decisions on this matter are unlikely to ever be reviewed.

Under such a narrow interpretation, accompanying civilian participation in remotely conducted combat activities can be almost unlimited. Accompanying civilians can participate

²⁸⁸ Turner & Norton, *supra* note 181, at 35-41. See also *Dangerous Work; Private Security Firms in Iraq*, *supra* note 241 (noting contractors in Iraq working outside military chain of command).

²⁸⁹ See Cha & Merle, *supra* note 279 (discussing possible misbehavior by loosely supervised civilian contractors interrogating Iraqis at Abu Ghraib prison).

directly in all activities not resulting in the infliction of damage, meaning they could engage in activities including operating UAVs performing intelligence missions or conduct CNAE operations targeting information residing in an enemy's computer network.

With respect to those operations that do inflict damage, remotely conducted combat activities could be structured in such a way as to comply with the technical requirements of the law of war while maintaining extensive civilian participation. A fleet of armed UAVs could be flown to a battlefield under the control of civilian operators who would notify a military member whenever a target for attack was spotted so he could press the button to launch a missile. A CNAE operation could be structured in a similar fashion. For example, a military CNAE operator seizes control of the SCADA computer system controlling a power plant for the purpose of inducing a major malfunction in the power-generating turbines. The military member is supported by a team of civilians including a contractor linguist and civil and computer engineers. The computer engineer explains how to access the SCADA system, the contract linguist translates the computerized control menus, and the civil engineer tells how to induce a malfunction in the turbines. In both the above situations, minimal military participation casts a penumbra legitimizing all the accompanying civilian support of these combat operations.

In sum, a narrow but ambiguous definition of what

constitutes combat means states have extensive leeway to structure their remotely conducted combat activities in such a way that civilians can be used for almost every remotely conducted combat operation. Even clear-cut combat operations can be performed with extensive civilian participation as long as a military member takes the action that directly causes harm to the enemy.

VII. Modifying the Law of War

The law of war restraints placed on accompanying civilian participation in combat related activity must take into account the fact states will not abandon or substantially reduce their reliance on accompanying civilians. States rely on these civilians to save money, reduce the political costs of military operations, increase the competence of their armed forces, and ensure vital weapons systems function.²⁹⁰ An overly broad ban on the activities accompanying civilian may participate in would, therefore, impact states' vital interests and be resisted. If a state engaged in a conflict has to choose between rigid adherence to the law of war or seeing that its planes, ships, and tanks can fight, recent history indicates states will not allow the law of war to constrain their actions.²⁹¹

The problems with how the law of war regulates accompanying civilians can be resolved by making three separate changes: 1)

²⁹⁰ See *supra* notes 196 and 234-247 and accompanying text.

²⁹¹ See *supra* notes 209-211 and accompanying text.

clarifying which activities constitute direct participation in hostilities, 2) allowing civilian employees to be designated as remote combatants, and 3) legitimizing targeting of accompanying civilians when they provide direct essential support. These changes should be made through two separate mechanisms. First, major military states should jointly issue a non-binding statement of principles containing their views on which specific activities constitute direct participation in hostilities. Second, a convention concerning the status of accompanying civilians should be negotiated under the auspices of the International Committee of the Red Cross to codify the new rules on remote combatant status and on the targeting of accompanying civilians.

A. Establishing Which Activities Should Be Considered
Direct Participation in Hostilities

1. Clarifying the Meaning of Direct Participation in
Hostilities

Direct participation in hostilities should be defined as consisting of direct participation in the following four activities: 1) direct infliction of damage to enemy personnel or equipment, 2) operation of a weapons system, 3) gathering intelligence for the immediate purpose of selecting targets for attack or assisting in the planning of imminent or ongoing

military combat operations, and 4) directing or advising on the conduct of imminent or ongoing combat operations. Under the current standard of what constitutes direct participation in hostilities, only the first category of activities, the direct infliction of damage, unambiguously qualifies as a combat activity.²⁹² All four of these activities belong together, however, because they capture the indispensable and immediate precursors to the delivery of violence.

The concept of what constitutes damage to enemy personnel and equipment needs to be broadened to explicitly cover damage to information residing within computer networks. Attacks on information processing computer systems that destroy, damage, or alter information can result in significant damage to an economy or military.²⁹³ Acknowledging attacks on information systems do cause damage recognizes the central role played by computer networks and ensures attacks on them during the course of an international armed conflict are restricted to combatants and regulated by the law of war.

The second type of activity that should be considered direct participation in hostilities is participation in the operation of a weapons system. This rule establishes that when a weapons system requires more than one person to operate it, all share combatant status. While this rule is an implication

²⁹² Even this category may be subject to qualification because contractors are widely used in situations where they may need to use force for defensive purposes. See *supra* notes 204-206 and accompanying text.

²⁹³ See *supra* notes 20-23 and accompanying text.

of the prohibition against the direct infliction of violence, making it explicit prevents a bifurcation in status amongst the members of of a weapons crew. For instance, if an accompanying civilian operates an armed UAV but a military member presses the button shooting the missile, then the civilian operator cannot disclaim combatant status by arguing he did not fire the missile.

Third, anyone gathering intelligence for the direct and immediate purpose of finding targets to attack or to direct combat operations against should also be considered a combatant. The classic example of such activity is an artillery spotter serving as the eyes for artillery guns which can shoot their rounds beyond the line of sight. With modern technology, these spotters may be able to find targets and direct fire from the vantage point of a UAV circling over a battlefield. Because this information may be directly relied upon to direct attacks, the UAV operators should be held responsible for adhering to the standards of the law of war.

The last type of activity that should be considered direct participation in hostilities is providing advice to or directing a state's armed forces concerning the conducting of an imminent or ongoing military operation. This type of activity may not involve firing weapons, but it is closely connected to decisions about choosing targets and methods of attack. While a single soldier may do considerable damage by himself, the person planning an attack involving a hundred or a thousand soldiers

may cause much more significant violations in the law of war because of the greater scale of forces responsive to his advice or orders.

Specifying these activities should be reserved to combatants is consistent with and encourages compliance with the law of war. Under that law, combatants receive the privilege of being entitled to use force lawfully: however, they also shoulder the responsibility of complying with the law of war. Individuals participating in all four types of activities may face situations where they will have to make judgments impacting on the use of force. The law of war can best serve its purpose of protecting the general civilian population if the people making decisions about when and how to attack an enemy receive combatant status with its attendant heightened obligation to respect and be trained in the principles of military necessity, distinction, and proportionality.²⁹⁴

2. Procedure for Specifying Which Activities Constitute Direct Participation in Hostilities

Major military states should issue a non-binding statement of principles wherein they will state the activities that they deem constitute direct participation in hostilities. Using these principles as guidance, states can then make changes to their military doctrines consistent with these principles.

²⁹⁴ See *supra* notes 100 and 161-177 and accompanying text.

Domestic laws and regulations could also be changed where appropriate to ensure enemy civilians captured in a conflict are only labeled unlawful combatants if they engaged in direct participation in hostilities as defined within the statement of principles. In addition, states could also issue internal guidance to their forces to ensure combatant roles are not filled by civilians. Actions such as these will begin to establish a pattern of state practice that could, in time, ripen into customary international law.²⁹⁵

This method for addressing what constitutes direct participation in hostilities possesses several advantages. First, this process can be handled much more quickly than going through a treaty process.²⁹⁶ Second, this method retains flexibility over defining participation in hostilities. A disadvantage of a treaty is that once the definition has been codified it can be difficult to change. This can be seen in the current standard for direct participation which has been essentially unchanged for more than one hundred years despite the numerous changes in the methods of warfare and civilian

²⁹⁵ See generally DIRECT PARTICIPATION IN HOSTILITIES UNDER INTERNATIONAL HUMANITARIAN LAW, INT'L COMM. OF THE RED CROSS, ch. 4 (2003), available at <http://www.icrc.org/Web/eng/siteeng0.nsf/iwpList74/459B0FF70176F4E5C1256DDE00572DAA> (noting consensus of experts participating in conference on need to research and clarify issue of what constitutes direct participation in hostilities, but lack of consensus on how this clarification should be achieved).

²⁹⁶ Nine years passed from the time the Int'L Comm. of the Red Cross proposed the convention that became Protocol I in 1968 until it was opened for signature in 1977. See Park, *supra* note 87, at 68-86 (discussing drafting history of Protocol I).

participation in them. In contrast, a non-binding statement can be supplemented or altered whenever changes in the conduct of warfare so warrant.

Finally, this method can be used without conflicting with states obligations under Geneva Convention III or Protocol I. Neither of these treaties defines direct participation in hostilities and the Protocol I Commentary contains only a brief discussion of the issue.²⁹⁷ The activities proposed for inclusion on the statement of principles are consistent with the terms of the treaties because they focus on activities closely associated with the infliction of violence. In addition, by better defining what constitutes direct participation in hostilities states will be complying with and promoting the purposes of these two treaties, particularly as they will make the line between combatants and civilians clearer, and so strengthen the principle of distinction.

B. Readdressing the Status of Accompanying Civilians

The legal status of accompanying civilians needs to be altered to better fit the roles they have assumed within states' armed forces. States should be able to designate civilian employees as remote combatants; that is, combatants who are authorized to participate in combat away from the battlefield, after ensuring they meet the applicable criteria for combatant

²⁹⁷ See *supra* notes 143-147 and accompanying text.

status and providing notification to the opposing state. Accompanying civilians who provide direct and essential support for combat operations should be recognized as legitimate targets for attack. These changes should be accomplished through the mechanism of a convention on the status of civilians accompanying the armed forces.

1. Designating Civilian Employees as Remote Combatants

States should be authorized, after providing appropriate notice to an opponent state, to designate civilian employees who are nationals as remote combatants who may operate unmanned vehicles or engage in CNAE from within a state's territory or onboard a military aircraft or ship. Allowing civilian employees to be designated as remote combatants confers three advantages: 1) it protects employees from becoming unlawful combatants, 2) it recognizes the principle that civilian employees should be able to play a greater role in combat activities than contractors, and 3) it addresses the legitimate state need for civilian expertise in the conduct of remotely conducted combat operations.

Accompanying civilian employees designated as remote combatants do not have to worry about the possibility of being considered unlawful combatants. As a result, they will not be subject to criminal liability for their actions that otherwise

comply with the law of war.²⁹⁸ Neither will designation as remote combatants place them at a significantly greater risk of being attacked because, working at military objectives as they do, accompanying civilian employees already face much more danger from an attack than the general civilian population.²⁹⁹

The ability to designate civilian employees as remote combatants will serve to increase the attractiveness of civilian employees relative to contractors when states determine the ratio of employees to contractors in the composition of their armed forces and establish the principle that civilian employees should be allowed greater participation in combat activities than contractors. Because civilian employees are subject to more direct control and supervision from the military than contractors receive, any shift in the composition of accompanying civilians that raises the proportion of civilian employees compared to contractors will increase compliance with the law of war.³⁰⁰

Disciplinary concerns are also addressed by restricting designation of remote combatants to employee nationals who are only authorized to directly participate in hostilities within a state's territory. These limitations will ensure states have a sound basis for asserting jurisdiction over an employee who may engage in behavior in violation of the law of war.³⁰¹ States may

²⁹⁸ See *supra* note 107 and accompanying text.

²⁹⁹ See *supra* notes 270-273 and accompanying text.

³⁰⁰ See *supra* notes 283-288 and accompanying text.

³⁰¹ See RESTATEMENT (THIRD) OF FOREIGN RELATIONS, 402 (1987) (noting bases for state jurisdiction to prescribe law).

also, during times of conflict, make civilian employees submit to military jurisdiction.³⁰²

Allowing civilian employees to serve as remote combatants recognizes states' interest in accessing civilian expertise. Because states rely on accompanying civilians to help support and operate for remotely conducted combat operations, refusing to permit employees to be designated remote combatants may give states an incentive simply to hide what their civilians are doing because remotely conducted combat operations are by their nature easy to conceal. If remotely conducted combat operations are driven further into concealment the chances of them being conducted in violation of the law of war will increase because of the difficulty in monitoring state actions and assigning responsibility for any breaches of the law.³⁰³

The main argument against allowing civilian employees to have status as remote combatants, that it undercuts the principle of distinction, does not withstand scrutiny. Even though the principle of distinction has been all but worn away between accompanying civilians and combatants, designating

³⁰² See AIR FORCE GENERAL COUNSEL GUIDANCE DOCUMENT, THE DEPLOYMENT OF CIVIL SERVICE EMPLOYEES 8 (Feb. 2004) for a discussion on disciplinary issues and criminal and court-martial jurisdiction over civilian employees. This document asserts *Reid v. Covert*, 354 U.S. 1 (1957) may not bar the military from asserting assert court-martial jurisdiction over civilian employees.

³⁰³ See Marco Sassoli, *State Responsibility for Violations of International Humanitarian Law*, 84 INT'L REV. OF THE RED CROSS 401, 404 (2002) (noting indispensable predicate for assigning responsibility to a state for a breach of international law is being able to attribute the violation to it).

civilian employees as remote combatants will not cause this principle any further deterioration. Civilian employees engaging in remote combat do so away from the battlefield while operating from military sites that states are required to keep segregated from the general civilian population.³⁰⁴

This separation from the scene of conflict and the general civilian population makes the actions of remote combatants different than the actions of civilians who fight with combatants at close quarters. When this proximity exists, the actions of some civilians can place others in danger if combatants repelling an attack from civilians can not, when returning fire, distinguish between civilians who are and are not participating in hostilities.

Designating civilian employees as remote combatants will not reduce adherence to the laws of war by sowing confusion over when civilians may be targeted. The desire to keep the law of war targeting rules simple to promote adherence to them is legitimate. Allowing civilian employees to be designated remote combatants does not add complexity to the system, however, because they will be operating from military objectives segregated from the general civilian population, so the prohibition against targeting civilian objectives will be maintained.³⁰⁵

Permitting the designation of civilians as remote

³⁰⁴ See *supra* notes 165-167 and 270-273 and accompanying text.

³⁰⁵ See ROGERS, *supra* note 77, at 9 ("If there is any hope that the law will be complied with, the rules must be as simple and straightforward as possible.").

combatants will not allow terrorists to garner combatant status.³⁰⁶ Terrorists are not members or employees of the armed forces and do not comply with the law of war.³⁰⁷ While civilian employees are not members of the armed forces, they do work directly for the state and serve under the supervision and control of military commanders for whose actions states are responsible.³⁰⁸

2. Accompanying Civilians Providing Essential and Direct Support Should Be Lawful Targets for Attack

The vital role accompanying civilians play in the military capacity of states' armed forces should be acknowledged by authorizing the targeting of accompanying civilians who provide direct and essential support to military combat operations. This change will protect the principle of distinction, remove an incentive for civilianizing militaries, and promote adherence to the law of war.

The principle of distinction is under distress because accompanying civilians are grouped together with the general civilian population.³⁰⁹ When accompanying civilians provide

³⁰⁶ See DETTER, *supra* note 93, at 145. Compare with Abraham Sofaer, *Terrorism and the Law*, FOREIGN AFFAIRS, Summer 1986, at 901.

³⁰⁷ See DETTER, *supra* note 93, at 145.

³⁰⁸ See AIR FORCE GENERAL COUNSEL GUIDANCE DOCUMENT and Sassoli, *supra* note 303, at 405 (arguing state responsibility for military members).

³⁰⁹ See *supra* notes 261-273 and accompanying text.

direct and essential support to military operations, they become logical targets for attack, even if the attack is against their workplace.³¹⁰ The law of war has not resolved the tension between the protection owed civilians and the military necessity for attacking accompanying civilians providing direct and essential support.³¹¹ Authorizing the targeting of this subclass of accompanying civilians resolves this tension with a logical rule that accepts that this particular group of civilians needs to be treated differently than the general civilian population.

This change in targeting status will have two additional effects. It removes the incentive for states to favor staffing positions with civilians rather than military members to take advantage of the protection offered by civilian status and it promotes adherence to the law of war by making the prohibition against attacking the general civilian population stronger.³¹²

3. Procedure for Authorizing Change in Civilian Status

The procedure for changing the status of accompanying civilians should be through a treaty negotiated under the auspices of the International Committee of the Red Cross, which

³¹⁰ See Park, *supra* note 87, at footnote 402, for a discussion about what he terms quasi-combatants or quasi-civilians, civilians whose direct military contributions warrant their being targeted for attack. For a contrary position, see ROGERS, *supra* note 77, at 8-9.

³¹¹ See *supra* notes 170-179 and accompanying text.

³¹² See *supra* notes 274-279 and accompanying text.

has expertise in this matter and a long history of participation in the development of the law of war and, in particular, the Geneva Conventions and Protocol I.³¹³ The proposed changes in accompanying civilian status should not, at a procedural level, be difficult to codify, including the process by which states notify one another if they will use accompanying civilian employees as remote combatants. This procedure can mirror the one already established for switching civilian members of police agencies to combatant status.³¹⁴

A treaty is the preferred method of action because these changes alter the terms of Protocol I, to which the vast majority of states belong. An elemental part of international law is that treaties are binding on parties to them and they must carry out their terms in good faith.³¹⁵ However, states interested in establishing these new rules concerning civilians can use a new treaty to change that rule amongst themselves.³¹⁶

A treaty is also the preferred course of action because unilateral national action cannot make effective changes to the status of accompanying civilians. An international armed conflict will by definition involve at least two states, neither of which will be bound by any domestically initiated alterations concerning the treatment of accompanying civilians in the absence of a binding agreement between them. If one state

³¹³ See DETTER, *supra* note 93, at 163-64.

³¹⁴ See *supra* notes 111-112 and accompanying text.

³¹⁵ See Vienna Convention on the Law of Treaties, May 23, 1969, art. 26, 8 I.L.M. 679, 690.

³¹⁶ See *id.* at art. 30.

designates accompanying civilians as remote combatants or targets them for attack when they provide direct and essential support, the opposing state may treat the accompanying civilians who participated in combat as unlawful combatants and the combatants who targeted accompanying civilians directly as war criminals.³¹⁷

States do share a broad interest in addressing the status of accompanying civilians. States throughout the world and at all levels of military power have become increasingly dependent on their use and would benefit from a reexamination of their status under the law of war.

VIII. CONCLUSION

The waging of modern war has changed significantly in recent decades both in terms of who participates and how they fight. The battlefield is becoming less the domain of the soldier as accompanying civilians and remotely operated vehicles take his place. New frontiers for conflict are being opened as states develop the means to attack each other through cyberspace.

The law of war has not yet accommodated these changes in

³¹⁷ See Protocol I, *supra* note 77, at art. 85(3)(a) (making the targeting of civilians a grave breach of Protocol I). See also Rome Statute of the International Criminal Court, July 17, 1998, Art. 8(2)(b)(i), UN Doc. A/CONF.183/9* (1998), reprinted in 37 ILM 999 (1998), corrected through May 8, 2000, by UN Doc. CN.177.2000.TREATIES-5 (making intentional attacks against civilians not taking direct part in hostilities a war crime).

the way states war. No suitable standards exist for determining what civilians accompanying the armed forces may do and when they may be targeted for attack. These failures to properly regulate the status of an increasingly important component of states' armed forces diminishes the protection the law of war provides the general civilian population.

States need to establish the status of accompanying civilians in a way that maintains the principle of distinction but also takes into account that accompanying civilians are an essential element of military power. Allowing civilian employees to be designated as remote combatants and legitimizing the targeting of those accompanying civilians who provide direct and essential support of combat operations will serve this task.